City of Duluth
Planning Division

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MEMORANDUM

DATE: June 30, 2014
TO: Duluth City Planning Commission
FROM: Charles Froseth, Land Use Supervisor
SUBJECT: Environmental Assessment Worksheet (EAW) for Steelton Hill Double Track (PL 14-047)

The purpose of this memo is to provide background and a recommendation regarding Planning Commission action on the Steelton Hill Double Track Project.

The 30-day public comment period for the EAW was from May 12, 2014 to June 11, 2014. As of the date of this memo, a total of **five comments** were received during the public comment period; three comments from a public agencies and two from the public. The comments submitted are attached to this document, as well as the responses from the applicant's representative.

On the July 8, 2014 agenda, the Planning Commission, as the Responsible Governmental Unit (RGU), is to make a determination on the need for an Environmental Impact Statement (EIS). Please reference the attached document titled "Findings of Fact"

Summary:

This project consists of the construction of a second mainline railroad track adjacent to the existing mainline track on Steelton Hill. A portion of the mainline railroad track will be re-aligned to improve both the horizontal and vertical track alignment. The project will cross several streams and wetlands including two streams of high resource value as determined by the Minnesota Department of Natural Resources. The proposed location of the project runs roughly alongside and northerly of the Becks Road Corridor between Gary New Duluth and Trunk Highway 35.

EAW:

According to the EQB document, Preparing Environmental Assessment Worksheets, the "purpose of the EAW, comments and comment responses is to provide the record on which the RGU can base a decision about whether an EIS needs to be prepared for a project. EIS need is described in the rules: An EIS shall be ordered for projects that have the potential for significant environmental effects."

"In deciding whether a project has the potential for significant environmental effects, the RGU shall compare the impacts that may reasonably be expected to occur from the project with the criteria in this rule, considering the following factors (part 4410.1700, subparts 6 and 7):

A. Type, extent, and reversibility of environmental effects;
B. Cumulative potential effects of related or anticipated future projects;

C. The extent to which environmental effects are subject to mitigation by ongoing public regulatory authority; and
D. The extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the project proposer, including other Environmental Impact Statements."

Recommendation:
Based on the Environmental Assessment Worksheet, the Findings of Fact and Record of Decision, and related documentation for this project, Staff recommends that the Planning Commission makes a Negative Declaration and does not require the development of an Environmental Impact Statement (EIS) for this project.

The Planning Commission is asked to review the attached information, consider public comment, and make a motion determining if an EIS is needed or not.

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June 4, 2014

Mr. Charles Froseth
Land Use Supervisor
City of Duluth
411 W. 1st Street, #402
Duluth, MN 55802

RE: EAW – Steelton Double Track
City of Duluth & Midway Twp, Saint Louis County
SHPO Number: 2014-1855

Dear Mr. Froseth:

We have received the EAW for the Steelton Double Track Project. We understand that this project requires a U.S. Army Corps of Engineers permit, and that cultural resource surveys have been completed. We look forward to receiving and reviewing the completed survey reports and will be consulting with the federal agency regarding the required Section 106 review.

If you have any questions or concerns, please contact Kelly Gragg-Johnson, Review and Compliance Specialist, at (651) 259-3455.

Sincerely,

Sarah J. Beimers

Sarah J. Beimers, Manager
Government Programs and Compliance

cc: Linda Pate, USACE

June 6, 2014

I wish to comment on the Environmental Assessment Worksheet for the Steelton Hill Double Track project. I have a Bachelor's degree in Geology with a focus in Land Use Planning, am certified in GIS and serve on the Duluth Public Utilities Commission which deals with the Stormwater Utility. My comments are my own.

Intoduction

The sale of St. Louis county tax forfeit lands necessary for this extensive project and facilitated through DEDA, in my opinion, was premature, with no respect shown to public comment and the environmental impact yet to be approved in this EAW.

The overall purpose of and need for this project must be taken into account before any specifics of the EAW are considered. Therefore I would like to begin with analysis of the response to item 6d, page 8.

The purpose stated is to increase train speed in and out of Steelton yard along with increasing train capacity. Efficiency is also mentioned in the purpose of the project.

The Steelton hill track has an existing steep grade—1.5 % to 1.9% reported in the EAW. Including the horizontal grade is said to then increase the "compensated" grade to greater than 2%. The horizontal segments of track are part of an accurate measurement of grade—rise/run. One cannot add or subtract a section of track to assess grade. Which is the accurate grade?

I also question how increasing the speed of trains out of Steelton yard, uphill, is an efficient use of fuel. Certainly trains are not desired to move faster within the yard and incoming trains are descending a steep hill where braking is more important to control speed than acceleration and use of fuel. Adding another track along the first doubles the negative impacts to dubious purpose except for added capacity.

The EAW mentions the lay-out of the Steelton yard tracks restricting train speed in the train yard. Certainly original train yard design considered aspects important to train movement, and speed, if considered at all, was not upmost.

The size and scope of this project are immense—almost five miles in length and involving two municipalities, 14 watercourse crossings, excavation and filling of

2 acres of critical wetlands, re-routing and removal of over a thousand feet of stream channel and potential for immense sedimentation and erosion into waterways during and after project completion. The scope and potential for degradation of the environment requires an EIS at the least, and abandonment of the project at best.

These points being made, I will now comment on the items required in the EAW in order of the response.

Item 6b, page 3

New tracks will be constructed on embankment of compacted fill from previously constructed embankments or clean fill.

All fill material is subject to greater dispersal in storm or flood events than native soil—especially when it lies perpendicular to waterway flow. Culverts provide no resistance, rather enhancing water movement. This places proximal fill material extremely vulnerable to erosion and failure such as we saw in the June 2012 floods in an area of similar slope---Highway 210 near Jay Cook Park, where the 6/4/2014 Duluth News Tribune just reported that flood-caused landslides and high stream flows through culverts caused the embankments that supported the roadway to fail. If this fill contains any calcium carbonate or reprocessed cement material, it will go into solution and become a pollutant in addition to sedimentation. This is the nature of 500-, or even 100- year flood events, predicted to be increasing in frequency in the future due to climate change.

Item6b, pages 3-4

Fish passage does not exist through existing culverts, the EAW states, and this will be assured in placement of two new culverts in trout streams. Culverts in streams are an insult to fish habitat. There has been some improvement in culvert design but no data to substantiate fish passage. To claim new culverts will maintain or improve habitat value of the watercourse cannot be true. The removal of existing

culverts within the project plans will impact the existing watercourse in a double insult to environmental integrity of the resource. Details of culvert placement or removal are lacking in the EAW due to contractor choice yet to be completed and will not improve the negative outcome no matter how it is carried out.

Item 6b, pp5

Wetland and floodplain impacts will include excavation and filling.

The area of wetlands hydrologically involved with existing waterways in the project area of such steep slope are extremely limited, as the infiltration of water to remove sediment and slow runoff, requires level grade. Along the project's 5-mile extent, the loss of 2 acres of wetland, mitigated elsewhere, is unacceptable for functionality. To reduce the negative impact to wetland integrity, the required temporary road construction within such areas should be completed in the winter months when wetland soil is frozen such as recommended in Correspondence # ERDB 20140195 from the DNR. This project is proposed for typical, summer-based construction times.

Item 6b, p 6

The construction sequence and methods are subject to change based on weather and contractor equipment.

This position stated in the EAW leaves any future activity out of public view and dependent on discussion with representatives of permitting agencies. This does not assure compliance to safeguards as work already begun will be on a timeline, needing to be facilitated for completion and out of public scrutiny. Environmental safeguards are likely to be sacrificed and no work practices, bulleted in the EAW can be taken as truth.

Item 6b, p7

Designated trout streams will not be disturbed during book trout spawning unless this work limitation may be waived if the DNR determines that the trout stream is not a critical trout stream.

First, this is an example of dubious discussion possible as indicated in the previous point. Secondly, this second level of designation to a trout stream is erroneous.

DNR designated trout streams do not vary in significance of that designation and again, this leaves violation of the resource within the confines of the EAW.

Item 7, p-9

Cover Types

The trees and vegetation in the 46 acre, 5 mile long project site will be cleared for a loss of indigenous cover of 14 acres.

The negative environmental impact from construction is most pronounced in the loss of natural functionality of ecosystems. Trees and vegetation provide stability to steep slopes, shade trout streams to provide water temperatures for this cold water designation, take up overland water flow through root systems and remove CO2, a greenhouse gas responsible for planetary warming. To lose this much valuable component of ecosystem health should be highly scrutinized, yet it is minimally dealt with in the EAW. Brief statements of claims to stabilize slopes and replant cannot possibly be considered as putting the ecosystem functionality back in place. New trees and vegetation, if they are replaced at all, will take years to become established and functional. Trout stream designation of two streams in the project area require minimal removal of shade trees already restricted in growth by the existing railway corridor.

Item 9a. &b., pp. 11-13

The EAW states the majority of the land for the project lies within the WC railway right-of-way and fits within existing land use zoning. Although included in the designations of project area as such, the future Preservation within a Sensitive Lands Overlay designation receives no importance as restricting development. The project map suspiciously leaves the project site with no designation, although it lies directly between Outstanding and High areas of Biodiversity Significance.

And why was it necessary for CN to get so much tax-forfeited, public lands for their corporate use through the DEDA-facilitated transaction if the above first statement about right-of-way is true? These public lands were probably forested and therefore contributed to the continuity of the Sensitive Lands resource—if

this project be approved, to have that vegetation removed and ecological functionality stripped.

There is also a City of Duluth, Mayoral driven, plan to re-develop the Western Waterfront of the St. Louis River for recreation and livability. This project will directly impact that plan for restoring a healthy environment because of the scope and environmental damage to the slope north of this Waterfront zone. Although not an official document, this plan has the environmental health of the St. Louis River Estuary as a cornerstone. The degradation of the land and subsequently, the adjacent waterways within the project site that empty into the St. Louis River is in direct conflict with this Chamber of Commerce approved, future direction for our city. The St. Louis River is currently designated as an "Area of Concern" by the MPCA for present impairment.

Item 9b, p14

The EAW claim that stream hydraulics will be improved to result in less flooding and sediment deposition is contradicted within the same document as well as being scientifically impossible. Floodplains will be filled and channel length is to be reduced by over 1000 linear feet. This can only result in increased flow velocity and amount, which will increase erosion, resulting in more sediment transport and higher water levels with decreased floodplain storage due to filling. The prevalence of well-drained soil classification in Table 1, p.15 are a testament to how fast water drains off these steep, channel slopes already.

Item 19c, p- 24

Cumulative potential effects resulting in significant environmental effects will be discounted in order of list:

1) Increased water quality by changing "hydraulics" and calling it improvement is bogus. Eliminating 1,072 lineal feet of stream channel will result in the degradation described in the above discussion of item 9b.

2) Improved opportunities for fish passage by placing two more culverts of undetermined design and questionable functionality cannot be proved.

3)Claiming decreased vehicle emissions as a result of this project when it will double the amount of railway that exists for double the amount of train traffic

and justifying it as replacing over-the-road transportation is a red herring, diversion tactic.

4) Loss of 18 acres of forested habitat is an understatement.

5) Wetland mitigation does not work. We need these wetlands where they are in their already limited expanse on this steep site terrain. They have developed over time and space in equilibrium with the natural environment. Obviously, when you lose wetlands, you lose their functions and value. There is a corresponding degradement in the water quality of the receiving water body they service. Contrary to this EAW statement, the long term, cumulative impacts of wetland loss are significant and detrimental to water quality.

Respectfully Submitted,

Linda Ross Sellner

402 Arrowhead Rd.

Duluth, MN 55803

218-728-1134

FROM: John L. Bergman
226 Paso Fino Lane
Duluth MN 55810-4513

TO: Mr. Charles V. Froseth – Land Use Supervisor
City of Duluth Planning Division
Department of Planning & Construction Services
Room 208 City Hall
411 West 1st St.
Duluth MN 55802

RE: Environmental Assessment Worksheet (EAW) for Steelton Hill Double Track project of CN Railroad

Mr. Froseth;

I have recently completed my review of the EAW for the above stated project (many hours!).

Herein, I am expressing my official public comments with regard to the project.

In spite of any comments made herein, I fully expect this project to be commenced as its schedule is proposed, simply due to the political power and economic influence of the CN railroad and the history of railroad-building in this country: I see it as [figuratively] being "railroaded" on a "fast-track" according to the contents Public-Relations (PR) "spin "of the EAW.

That is not to say I am particularly opposed to the project; just, that the document and project has many issues as identified below.

1. I believe that Minnesota (MN) statutes require all public documents to have a glossary page in the frontispiece section of the document: That is sorely lacking. As evidence, I had to "dig" throughout through the document to "find" full-word references to many of the acronyms used throughout.

2. Page 2, Section 5, answer to "Site location maps..." tries to identify "...the two high value resource streams..."; please have them named in this paragraph. I can only insinuate (from other comments in the document) that the two streams are, indeed, Sargent's Creek, and Mission Creek; they are not specifically named here.

3. Page 3, Section 6, 2nd answer paragraph where it textually limits the project's Northwest termination to being "...southeast.." of I-35, but goes on to identify "...Railroad MP [I (again) assume MilePost] 472.20..." This is inconsistent within itself because MP 472.20 is at Nopeming Junction which is a short distance Northwest of I-35; also, this is inconsistent with some of the project outline maps as presented in the EAW package (also showing the project extending to Nopeming Junction).

4. Page 3, Section 6, 4th answer paragraph addresses the removal and replacement of BR 468.05 at 108th Av (should be "...108th Av ***W***..."), but does not at all address what is to happen to the bridge at BR 468.33 location. What is to become of it? Is it to be continued "in-use"? If not, is it also to be removed and reclaimed? I submit that if it is to be abandoned, that it will become an "attractive nuisance" under the law: It should also be removed and reclaimed as for the existing BR 468.05.

5. Page 4, has numerous references to "...108th Av..." which should be "...108th Av ***W***..." 4th answer paragraph says that one of the new bridges over Commonwealth Av [100th Av W, MN Hwy 23] "...will be located north..." of the old existing bridge, yet the project outline maps of Figure 5e show the northern boundary of the project not to be inclusive of that area: That map is not accurate.

6. Page 4, 5th and 6th answer paragraphs talk about Munger Trail crossing bridges over the new proposed trackage, but do not state how wide: Are the bridges widths going to be acceptable to the public which uses them? Has this issue been publicly, locally, and widely discussed?

7. Page 5, 2nd answer paragraph (and elsewhere following) mentions "Beck..." road. This is a simple mistake, but important to our local area: It is ***Becks*** road, named after one of the earlier St. Louis County Commissioners who was instrumental in having the road first constructed; his surname is Becks (with the "s").

8. Page 8, Section 6, subsection d., 1st answer paragraph makes a statement about "...the compensated grade..." of 2%; this needs to be defined, as the previous sentences mention grades of from 1.50 to 1.90%

9. Page 9 Section 6, subsection e. 1st answer paragraph states "...that Phase 1 would be completed during the 2014 construction season." Between the EAW public commentary constraints of 30 days, the Commentary reviews, and any further action which may need to be taken in those regards, this leaves very little time during 2014: This is what leads me to the conclusion that this project is on a "fast-track", and being "railroaded". I do not see that any other conclusion can be reached as to the public's involvement and interests.

10. Page 11, Section 9.a.ii 1st City of Duluth answer paragraph near bottom of the page (and elsewhere following) uses the "word" "*Orientated*" which is an archaic spelling of the word "Oriented" used elsewhere in the document.

11. Page 13, Section 9. b. 2nd answer paragraph mentions that the Munger Trail follows the former St. Paul & Duluth and BN railroad grade between Carlton and western Duluth. Should it not also mention its third name: "Short-Line Railroad"?

12. Page 13, Section 9. b. 5th answer tries to put a good "spin" on the project not significantly affecting nearby land use beyond that already existing: This project is being proposed to enable the railroad to open-up a bottleneck in order to substantially increase throughput of railroad traffic to dramatically increase freight shipping: There is no other operational advantage to the railroad to spend millions of dollars on this "upgrade". This will mean a substantial increase in Railroad traffic with its substantial concomitant increase in noise pollution from grade-crossing whistle-

blowing 24-hrs X 7-days a week all year. It will also have a substantial negative impact on North Cloquet Road and Midway Road emergency services, and automotive-type road traffic; especially for those of us folks living in proximity and using those roads daily. Since the CN bought-out the DM&IR trackage, the delays have already substantially increased due to the presently increased train traffic; this project will only serve to again increase it much more.

I would suggest that both Carlton and St. Louis Counties work with the CN to find ways (including additional road bridge building over the Railroad) at all 4 sites to alleviate these very serious negative issues for Midway and Thomson Townships, and the Adolph crossings, in particular.

13. Page 14, Section 10. a. answer paragraph mentions that there are no known "...unconfined/shallow aquifers...": There is one that I know of which has been a concern for the previous DM&IR and present CN owners for years just east of the 108th Av W bridge. There is a definite awareness as both owners have done extensive drainage work in that area which includes what I would call "quicksand" drainage out of the south embankment of the existing RR ROW.

14. Page 16, Section 10. b. 2nd answer paragraph: "***contractor***" is misspelled as "contactor".

15. Page 17, Section 11. a. ii answer paragraph states that no nearby water wells were identified: A simple look at each residential site along the route will identify many water wells "nearby". What defines "nearby"? Why are these not identified by personal survey? There are at least 2 residential water wells "near" 108th Av W, and many more near Ely's peak in the Shortline Park neighborhood of Duluth, plus more along Becks Road toward I-35. It also states the "...depth to groundwater ***various***..." which, I must assume, is a misspelling of ***varies.***

16. Page 17, Section 11. b. ii answer paragraph mentions "...Sargent..." creek, which should be spelled as ***Sargent's*** creek (add the ***s***).

17. Page 18, Section 11. b. iii answer paragraph again states no nearby wells: Please see comments in my #15 above.

18. Page 19, Section 12. a. answer says "Not Applicable." This is in serious error, as the north bridge crossing at Commonwealth Avenue on its eastern end is proposed to be constructed on property that was a previous Minnesota Power & Light electrical utility substation for many decades: Thus, it is highly probable to contain contaminants such as Poly-Chlorinated Biphenols (PCB's) which were a component of electrical power transformers and switch-gear for many decades too. Part of this property was also part of the old United States Steel Universal Atlas Cement manufacturing plant, and may have additional pollution related to that operation.

19. Page 20, Section 12. d. answer says "Not Applicable. There will be no...generated" NO ONE can ever make an honest statement of this sort without being an arrogant fool! What will be done if there IS a problem??? This needs a real answer!

20. Page 23, Section 17, Answer does not at all address the future and continuing substantially increased operational noise as I mentioned in my point #12 above. It only addresses construction noise. It requires operational noise to also be addressed in detail: Proposed future increased daily, weekly, yearly RR traffic on each of the two tracks fed Northerly of Nopeming Junction-- what is projected for the next ten to twenty years? The RR knows this: They wouldn't make such a substantial investment in this "upgrade" without having "run the numbers".

21. Page 23, Section 18.a. Answer does not address disruption of public parking at Ely's Peak and Munger trail use along the construction route during the summer construction season: This has the potential to seriously impact trail traffic and use with its concomitant impact on both the public and public-dependent business that relies upon that traffic. Is the RR planning to establish nearby detour routes so that the Munger and Mission trails are able to remain open at all times? I would strongly suggest that this be done. Can the additional Munger trail bridge be built on the level with the trail and excavated later for the RR so that the Trail is not interrupted? This question is also applicable to the other Trail bridge replacements, as well. What about detour of local traffic for the 108th Av W bridge replacement and demolition/reclamation? Specifically how/what plans are there, to accommodate each and all of these issues?

22. Page 23, Section 18. b. does not present the traffic statistics to justify the "Not Applicable" answer. How does the public "know" that this is not applicable per the MN requirements? Please publish the statistics.

23. Page 23, Section 18. c. does not answer any question as to how roadway or trail blocking (even temporary) will be handled. Please give specific plan answers to this question for both trail and roadway use. Undoubtedly, Commonwealth Av and parts of the Munger Trail as well as the Becks' Road overpass will need to be blocked many times during construction of the various bridges/ RR underpasses.

24. Page 24, Section 19. b answer shows "Unknown" It is very apparent that future would most probably include another (2nd) RR bridge over I-35. Various inconsistent statements and plan drawings throughout the EAW answers (see my item #3 above) can only lead to this conclusion. Additionally, it makes no common, practical, or economic sense to not construct another bridge over I-35 in the future, as this will be the only "bottleneck" between Steelton Yards, and the two individual existing track lines fed-to at Nopeming Junction. It may not be economically feasible presently, but is surely already "on the drawing-boards" as indicated by the previously-mentioned EAW plan and drawing inconsistencies which DO indicate such an additional bridge. In addition, I expect that the CN RR may also opt to upgrade the Oliver Bridge back to its original two-track service from Steelton to Oliver and beyond to their Pokegama Yards.

25. Page 24, Section 20 shows no answer whatsoever; if nothing else, it should at least show "Not Applicable".

This is the present extent of my "Public Comments" regarding this EAW about the proposed project.

I may be contacted at the above address with any further questions, comments, or concerns.

Minnesota Department of Natural Resources
Northeast Region • 1201 East Highway 2 • Grand Rapids MN • 55744

June 10, 2014

Charles Froseth
Land Use Supervisor
411 West First Street #402
Duluth, MN55802

ERDB #: 20140195-0002

RE: Steelton Hill Double Track EAW

Dear Mr. Froseth:

The Department of Natural Resources (DNR) Northeast Region has reviewed the Steelton Hill Double Track Environmental Assessment Worksheet (EAW). The DNR appreciates the communication that has occurred so far and has the following comments for your consideration.

The DNR Moose Lake Parks and Trails Area has been working with Canadian National (CN) on this project as it affects the Munger Trail. To address trail concerns, CN has come to an agreement on property available to purchase right of way and build a new bridge.

The DNR recognizes that CN has worked with us to accommodate high value streams with redesign alternatives; however we have concerns with the standard directional boring approach. There may be significant stream realignment and the resulting crossings will likely not provide fish passage and water quality improvement or stream benefits as suggested.

The DNR will address more details in the upcoming Public Waters Permit and would appreciate the opportunity to be involved in pre-construction meetings to discuss alignments and construction ideas or designs.

Thanks for the opportunity to comment, please feel free to call or email me with any questions you may have.

Sincerely,

Rian Reed
Regional Environmental Assessment Ecologist
MNDNR
1201 East Hwy 2
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rian.reed@state.mn.us

Minnesota Pollution Control Agency

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June 11, 2014

Mr. Charles Froseth
City of Duluth
411 W 1st Street #402
Duluth, MN 55802

Re: Steelton Hill Double Track Environmental Assessment Worksheet

Dear Mr. Froseth:

Thank you for the opportunity to review and comment on the Environmental Assessment Worksheet (EAW) for the Steelton Hill Double Track project (Project) located in portions of the city of Duluth and Midway Township, Minnesota. Regarding matters for which the Minnesota Pollution Control Agency (MPCA) has regulatory responsibility and other interests, the MPCA staff has the following comments for your consideration.

Item 8 – As indicated, the project will require coverage under a National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater General Permit. However, the EAW does not clearly state the total disturbance (Item 6c states the project magnitude equals 46 acres and Item 7 states the total project area by cover type equals 75 acres). For projects that disturb 50 acres or more and have a discharge point within a mile of, and flows to, a special water (this includes Sargent Creek and Mission Creek), the owner and operator must submit the application and Stormwater Pollution Prevention Plan (SWPPP) to the MPCA at least 30 days before the start of construction activity. Given the topographic setting of the project, the fourteen stream crossings, and the potential disturbance nearing fifty acres, MPCA staff encourages the project proposer to consider submitting their application and SWPPP for review.

Item 11 – Please note that Sargent Creek is listed on the MPCA's Impaired Waters (303(d)) List for impairments to aquatic recreation due to Escherichia *coli*. It is not anticipated that this Project or construction activities will contribute to or exacerbate this impairment.

Item 12b – Wastes generated from the project, including materials from the track realignment (track, ties, plates, and spikes) and from the bridges that will be removed from over U.S. Steel Creek and Commonwealth Avenue (bridge superstructure) should be managed according to Minnesota Solid Waste and Hazardous Waste rules and guidance.

As noted in the EAW, the project has 14 water crossings. Two of them are trout streams and several other are unnamed tributaries to the trout streams. These tributaries need to be treated in the same manner as the trout streams. At this point, only a general statement saying they will follow the best management practices from the Minnesota Department of Natural Resources for high resource value streams exists. More specifics would are needed, including the process for the removal of at least one crossing.

We appreciate the opportunity to review this Project. Please provide your specific responses to our comments and the notice of decision on the need for an Environmental Impact Statement. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this EAW, please contact me at 651-757-2482.

Sincerely,

Kevin Kain
Planner Principal
Environmental Review Unit
Resource Management and Assistance Division

KK:bt

cc: Craig Affeldt, MPCA
Tom Estabrooks, MPCA Regional Manager
Jim Brist, MPCA

June 26, 2014 1303084

Mr. Charles Froseth
Land Use Supervisor
City of Duluth
411 W 1st Street #402
Duluth, Mn 55802

RE: ENVIRONMENTAL ASSESSMENT WORKSHEET
STEELTON HILL DOUBLE TRACK
MPARS APPLICATION NO. 2014-1619
USACE FILE NO. 2013-04887-DDW

Dear Mr. Froseth:

On behalf of Wisconsin Central Ltd. (WCL) (owner/applicant) and pursuant to our telephone conversation on May 10, 2014 and subsequent e-mail communications, Golder Associates Inc. (Golder) respectfully submits this letter regarding the referenced project.

It is noted that the Environmental Assessment Worksheet (EAW) was completed and submitted to the City of Duluth (City) on April 8, 2014. Subsequently, there have been minor changes to the proposed activities and project-related documents as a result of continued consultation with the regulatory agencies involved, notably the US Army Corps of Engineers (USACE), Minnesota Department of Natural Resources (MnDNR), and the City and their representatives. Since submittal of the EAW, the project has been updated/revised to reflect the following:

- There will be no modification to the existing culvert or stream in Location 471.55. A bridge will be constructed over the existing culvert.
- There will be no modification to the existing culvert or stream in location 470.31 and 470.80. A headwall and fill will be used to span the existing culverts.
- Supplemental wetland delineation that included areas that are beyond the initial delineation limits.
- The revisions to the wetland delineation maps reflect the supplemental delineation. Note: the wetland boundaries have been reviewed and verbally approved by the City (via the South St. Louis County Soil and Water Conservation District [SSLCSWCD]).
- Project plans have been revised to reflect the updated wetland boundaries and revisions to proposed watercourse crossings, particularly for the two watercourses in the locations of structures at Mile Post (MP) 471.55 and MP 470.30.
- Wetland impacts have been revised to reflect a total of 1.257 acres.
- Stream impacts have been revised to reflect a total of 858 lineal feet of stream.

The revised wetland maps, project plans, and impact tables (i.e., MnDNR/USACE Joint Permit Application [JPA] Tables 1a, 1b, 2, and 4) have been submitted to the USACE, MnDNR, and the City. A copy of the revised wetland maps and project plans are included with this letter. At this time, WCL continues to consult with the various regulatory agencies involved with the project to ensure compliance with the various permit programs. As such, there may be additional changes to the proposed activity. However, these changes will be an effort to further reduce impacts to wetlands and watercourses along the project site. As previously indicated and discussed with the City and other regulatory agencies, WCL will not proceed with work in regulated areas without obtaining the necessary permits and approvals.

The purpose of this letter is to address the public comments submitted to the City in response to the EAW that was submitted to your office on April 28, 2014. The following is a summary of questions/comments and Golder's/WCL's responses. Several of the comments have been paraphrased and/or condensed to summarize the main points. The responses to the public comments reflect the most recent project information.

Letter from Linda Ross Sellner dated June 6, 2014

Comment: Page 3, Item 6b. New Tracks will be constructed on embankment of compacted fill. All fill material is subject to greater dispersal in storm events than native soil. Culverts provide no resistance other than enhancing water movement. This places proximal fill material extremely vulnerable to erosion and failure such as we saw in the June 2012 floods in an area of similar slope. If this fill contains any calcium carbonate or reprocessed cement material, it will go into solution and become a pollutant in addition to sedimentation. This is the nature of 500- or even 100-year flood events predicted to increase in frequency in the future due to climate change.

Response: *Soil erosion and sedimentation controls will be implemented and maintained throughout the project in accordance with appropriate industry and regulatory standards to result in a stable embankment and minimize the potential for erosion and slope failure. WCL will take all reasonable precautions to stabilize all slopes along the project, as stability is paramount to safety and operation of the tracks. Fill material selected for placement in the embankments will not include significant concentration of calcium carbonate or other highly water soluble constituents that will leach from the embankment resulting in failure. Fill material will be free of re-processed cement material. WCL will have inspectors on site during fill placement and compaction to verify the material is of the appropriate quality and has been compacted to project specifications, which is 90 percent for clay and 95 percent for sand and aggregate base.*

Comment: Pages 3-4, Item 6b. Fish passage does not exist through existing culverts, the EAW states, and this will be assured in placement of two new culverts in trout streams. Culverts in streams are an insult to fish habitat. There has been some improvement in culvert design but no data to substantiate fish passage. To claim new culverts will maintain or improve habitat value of the watercourse cannot be true. The removal of existing culverts within the project plans will impact the existing watercourse is a double insult to environmental integrity of the resource. Details of culvert placement or removal are lacking in the EAW due to contractor choice yet to be completed and will not improve the negative outcome no matter how it is carried out.

Response: *WCL has been and will continue consulting with the MnDNR. Based on the most recent communication with the MnDNR (i.e., e-mail from Deserae Hendrickson on June 16, 2014), there are three locations along the project in which fish passage is required by the MnDNR (i.e., Locations 471.55, 470.80 and 470.31). since completion of the EAW, the project plans have been revised to avoid impacts to the existing culverts and streams in these three locations; WCL will not be replacing culverts or modifying the streams in these locations. The revised plans for Locations 471.55 and 470.31 were provided to the MnDNR and others on April 21, 2014; and the revised plans for Location 470.80 were provided on June 26, 2014. They are currently available for review on the MnDNR Permitting and Reporting System (MPARS) (i.e., MPARS Permit Application No. 2014-1619).*

Comment: Page 5, Item 6b. Wetland and floodplain impacts will include excavation and filling. The area of wetlands hydrologically involved with existing waterways in the project area of such steep slope are extremely limited, as the infiltration of water to remove sediment and slow runoff, requires level grade. Along the project's five-mile extent, the loss of two acres of wetland mitigated elsewhere is unacceptable for functionality. To reduce the negative impact to wetland integrity, the required temporary road construction within such areas should be completed in the winter months when wetland soil is frozen such as recommended in Correspondence # ERDB 20140195 from the MnDNR. This project is proposed for typical, summer-based construction times.

Response: *WCL has consulted with staff from the USACE and SSLSWCD regarding mitigation options for the proposed project. Given the site-specific conditions and typical limitations of wetland creation, it is not feasible to mitigate by constructing wetlands on the project site adjacent to the impacted wetland areas and/or stream reaches associated with the wetlands. Off-site mitigation through the purchase of credits at an established wetland mitigation bank was suggested and has been tentatively approved as the preferred option by regulatory agencies. At this time, WCL anticipates the purchase of credits from the University of Minnesota Wetland Bank. The final decision to approve the purchase of credits as acceptable mitigation will be made by the Technical Evaluation Panel (TEP) under Minnesota's Wetland Conservation Act (WCA).*

Due to the accelerated time schedule and limitations posed by winter work, it is not reasonable to restrict the construction of temporary access drives to the winter months. If approved in time, the project will begin and a majority of initial earth moving and grading, including installation of temporary access drives, will be completed before the end of the 2014 construction season; particularly in Phase 1 of the project. Temporary drives will be constructed in accordance with appropriate best management practices (BMPs) and guidance/requirements of the various regulatory agencies that will be issuing permits for the project (e.g., USACE, MnDNR, Minnesota Pollution Control Agency [MPCA], etc.).

Comment: Page 6, Item 6b. The construction sequence and methods are subject to change based on weather and contractor equipment. This position stated in the EAW leaves any future activity out of public view and dependent on discussion with representatives of permitting agencies. This does not assure compliance to safeguards as work already begun will be on a timeline, needing to be facilitated for completion and out of public scrutiny. Environmental safeguards are likely to be sacrificed and no work practices bulleted in the EAW can be taken as truth.

Response: *WCL has provided specifications to the contractors who will be working on the project and is confident they will work within those specifications in accordance with industry standards and regulatory agency permit requirements. It is not possible or reasonable for WCL to provide a definitive description of work that will be performed, as most projects encounter variations and challenges that must be addressed in specific locations and/or for specific tasks. All applicable regulatory agencies will be notified of any changes to the proposed activities that are not consistent with permit requirements. WCL will obtain appropriate approvals before performing work that is not consistent with permitted activities. WCL understands that they will be held accountable by the appropriate public regulatory agencies for any non-compliant work that may occur (e.g., USACE, MnDNR, MPCA, etc.) and will; therefore, make efforts to ensure that construction activity is completed in accordance with permit requirements and conditions.*

Comment: Page 7, Item 6b. Designated trout streams will not be disturbed during brook trout spawning unless this work limitation be waived if the MnDNR determines that the trout stream is not a critical trout stream. First, this is an example of dubious discussion possible as indicated in the previous point. Secondly, this second level of designation to a trout stream is erroneous. MnDNR designated trout streams do not vary in significance of that designation and, again, this leaves violation of the resource within the confines of the EAW.

Response: *There is no dubious discussion regarding this issue. WCL has been and continues to consult with the MnDNR regarding work in streams. If a stream is designated a trout stream, work will not be performed in the stream from September 15 to April 30 for brook trout spawning. The MnDNR will make this determination as part of their review, and WCL will abide by that determination and requirements of the MnDNR permit once it is issued.*

Comment: Page 8, Item 6d. The purpose stated is to increase train speed in and out of Steelton yard along with increasing train capacity. Efficiency is also mentioned in the purpose of the project. The Steelton hill track has an existing steep grade - 1.5 % to 1.9% reported in the EAW. Including the horizontal grade is said to then increase the "compensated" grade to greater than 2%. The horizontal segments of track are part of an accurate measurement of grade - rise/run. One cannot add or subtract a section of track to assess grade. Which is the accurate grade?

I also question how increasing the speed of trains out of Steelton yard, uphill, is an efficient use of fuel. Certainly trains are not desired to move faster within the yard and incoming trains are descending a steep hill where braking is more important to control speed than acceleration and use of fuel. Adding another track along the first doubles the negative impacts to dubious purpose except for added capacity. The EAW mentions the lay-out of the Steelton yard tracks restricting train speed in the train yard. Certainly original train yard design considered aspects important to train movement, and speed, if considered at all, was not utmost. The size and scope of this project are immense - almost five miles in length and involving two municipalities, 14 watercourse crossings, excavation and filling of 2 acres of critical wetlands, re-routing and removal of over a thousand feet of stream channel and potential for immense sedimentation and erosion into waterways during and after project completion. The scope and potential for degradation of the environment requires an Environmental Impact Study (EIS) at the least, and abandonment of the project at best.

Response: *The existing track profile on Steelton Hill climbs steadily from North Steelton Yard to Nopeming Junction with existing grades ranging from 1.50 percent to 1.90 percent. Typically, a railroad mainline track has a vertical grade of less than 1.00 percent. The compensated grade takes into account the horizontal grade and determines the total resistance of a train on a horizontal curve on a gradient. For the existing track, the compensated grade is 2.10 percent. In addition, at the north end of Steelton Yard, the track turnout into Steelton Yard is a right hand turnout. This requires that all trains operating along the mainline track operate through the diverging side of the turnout, not the straight side. As a result, train speeds are restricted at the bottom of Steelton Hill (North Steelton Yard), as they have to operate through the diverging (slow) side of the turnout.*

Currently, mainline trains require additional locomotives be added to the back of trains ascending Steelton Hill to provide additional horsepower to push the trains up Steelton Hill due to the conditions discussed above. These additional locomotives require additional fuel consumption. By reducing the compensated grade up Steelton Hill and re-configuring the north end of Steelton Yard so mainline trains do not have a speed restriction at the bottom of Steelton Hill (North Steelton Yard), trains will be able to carry more speed up Steelton Hill and require less horsepower (additional locomotives) to be added. This will result in less fuel being consumed per train ascending Steelton Hill.

With respect to the need for an EIS, the project does not meet the threshold for a mandatory EIS as identified in Minnesota Administrative Rule 4410.4400, Subparts 2 to 25 and abandonment of the project is not a reasonable alternative.

Comment: Page 9, Item 7. The trees and vegetation in the project site will be cleared for a loss of indigenous cover of 14 acres. The negative environmental impact from construction is most pronounced in the loss of natural functionality of ecosystems. Trees and vegetation provide stability to steep slopes, shade trout streams to provide water temperatures for this cold water designation, take up overland water flow through root systems, and remove CO2, a greenhouse gas responsible for planetary warming. To lose this much valuable component of ecosystem health should be highly scrutinized, yet it is minimally dealt with in the EAW. Brief statements of claims to stabilize slopes and replant cannot possibly be considered as putting the ecosystem functionality back in place. New trees and vegetation, if they are replaced at all, will take years to become established and functional. Trout stream designation of two streams in the project area require minimal removal of shade trees already restricted in growth by the existing railway corridor.

Response: *Vegetation clearing has been limited to the minimum area required for the project. The entire project has been reviewed and will be considered by various regulatory agencies including the MnDNR, USACE, SSLSWCD, City of Duluth, and others. WCL does not suggest that the disturbed ecosystem can be replaced, only that they have endeavored to reduce direct impacts, minimize indirect impacts, and stabilize disturbed areas with vegetation native to the region in accordance with current regulatory policies and requirements.*

Comment: Pages 11-13, Items 9a and 9b. The EAW states the majority of the land for the project lies within the WCL railway right-of-way (ROW) and fits within existing land use zoning. Although included in

the designations of project area as such, the future Preservation within a Sensitive Lands Overlay designation receives no importance as restricting development. The project map suspiciously leaves the project site with no designation, although it lies directly between Outstanding and High areas of Biodiversity Significance.

And why was it necessary for CN to get so much tax-forfeited, public lands for their corporate use through the DEDA-facilitated transaction if the above first statement about ROW is true? These public lands were probably forested and; therefore, contributed to the continuity of the Sensitive Lands resource, if this project be approved, to have that vegetation removed and ecological functionality stripped.

There is also a City of Duluth, Mayoral driven, plan to re-develop the Western Waterfront of the St. Louis River for recreation and livability. This project will directly impact that plan for restoring a healthy environment because of the scope and environmental damage to the slope north of this Waterfront zone. Although not an official document, this plan has the environmental health of the St. Louis River Estuary as a cornerstone. The degradation of the land and, subsequently, the adjacent waterways within the project site that empty into the St. Louis River is in direct conflict with this Chamber of Commerce approved, future direction for our city. The St. Louis River is currently designated as an "Area of Concern" by the MPCA for present impairment.

Response: *The project maps clearly depict the planned project location. The general project area is shown on the Site Locator Map (Figure 2) and the alignment for the proposed track is clearly identified on the Project Location Map (Figure 3) included with the EAW.*

As indicated in the JPA (Response to Application Part II, Section 12, Special Considerations), WCL has acknowledged that a portion of the site is located in an area mapped as "Site of Biodiversity Significance" and has addressed this as part of the JPA process. The following is a condensed excerpt from the JPA.

A Natural Heritage Information System (NHIS) Data Request Form was submitted to the MnDNR on January 9, 2014. The MnDNR provided a letter dated February 11, 2014 that identified one rare feature that may be adversely impacted by the proposed project. This feature is the presence of an area documented by the Minnesota Biological Survey (MBS) as a Site of Biodiversity Significance along significant portions of the site. The following is an excerpt from the MnDNR letter.

"*Sites of Biodiversity Significance have varying levels of native biodiversity and are ranked based on the relative significance of this biodiversity at a statewide level. Sites ranked as High contain very good quality occurrences of the rarest species, high quality examples of the rare native plant communities, and/or important functional landscapes. Within this Site, the proposed track crosses an Aspen – Birch – Basswood Forest native plant community, which is considered uncommon but not rare in Minnesota. Given the ecological significance of this area, disturbance within the MBS Site should be minimized to the extent feasible. Actions to minimize disturbance may include, but are not limited to, the following recommendations:*

- *As much as possible, operate within already-disturbed areas*
- *Minimize vehicular disturbance in the area (allow only vehicles/equipment necessary for track removal and installation)*
- *Do not park equipment or stockpile supplies in the area*
- *Do not place spoil within MBS Sites or other sensitive areas*
- *Inspect and clean all equipment prior to bringing it to the site to prevent the introduction and spread of invasive species*
- *If possible, conduct the work under frozen ground conditions*
- *Use effective erosion prevention and sediment control measures*

- *Revegetate disturbed soil with native species suitable to the local habitat as soon after construction as possible*
- *Use only weed-free mulches, topsoil, and seed mixes"*

WCL understands the importance of minimizing impacts to areas of biodiversity significance and will minimize impacts as much as feasible by limiting project activities to the minimum work areas needed to complete the project activities and implementation of the BMPs in the Storm Water Pollution Prevention Plan (SWPPP). Of the recommendations offered by the MnDNR, WCL has agreed to implement all of them except for conducting work under frozen ground conditions, which is not feasible given the time constrains associated with the project schedule.

With respect to the need for WCL to obtain tax-forfeited, public lands; it is true that a majority of the project will take place within the current railroad ROW. However, there are areas that fall outside of existing WCL ownership, particularly in the proposed realigned segments. In these areas, WCL is acquiring only enough property to accommodate the proposed project.

With respect to the City of Duluth plan to re-develop the Western Waterfront of the St. Louis River for recreation and livability, WCL is of the opinion that implementing the project in accordance with permit requirements and guidance provided by the various regulatory agencies (USACE, MnDNR, City of Duluth, MPCA, etc.) will not impact plans the City or others may have for restoration or redevelopment projects in the Western Waterfront of the St. Louis River. The proposed project will not result in any further impacts to the St. Louis River or contribute to its status as an "Area of Concern."

Comment: Page 14, Item 9b. The EAW claims that stream hydraulics will be improved to result in less flooding and sediment deposition is contradicted within the same document as well as being scientifically impossible. Floodplains will be filled and channel length is to be reduced by over 1,000 linear feet. This can only result in increased flow velocity and amount, which will increase erosion resulting in more sediment transport and higher water levels with decreased floodplain storage due to filling. The prevalence of well-drained soil classification in Table 1, Page 15 are a testament to how fast water drains off these steep channel slopes already.

Response: *Since submittal of the initial EAW, the project has been revised to reduce the total length of streams that will be impacted by the project to a total of approximately 905 lineal feet. Hydraulic calculations have been prepared for each stream crossing. These calculations were presented in the Replacement Structure Recommendation Reports included with the initial JPA. Results of the calculations demonstrate that the upstream flood elevations will be lowered in a majority of locations following completion of the project. In areas where the flood elevation is not reduced, they will remain the same. There will be no increase in flood stage on the upstream side of any stream crossing as a result of the project.*

With respect to flow velocity and amount increasing erosion and sediment transport, the hydraulic reports indicate that water velocities will be reduced through the culverts during storm events compared to their existing conditions. The corresponding reduction in velocity will result in less erosive force on the stream bank and bed, reducing erosion and facilitating the natural function of sediment transportation and deposition within the stream bed. It is the process of sediment transportation and deposition that forms meanders, riffles, and pools that increase the variety of natural habitat in the stream. The amount of water flowing through the stream will not change significantly as a result of the project, only the manner in which it is conveyed through the various stream crossing locations.

With respect to floodplain filling and loss of floodplain storage, WCL has identified those areas within designated floodplains and will provide for compensating cut to offset the loss of floodplain storage. A Special Use Permit for the floodplain fill and compensating cut was approved by the City of Duluth (i.e., Action of the City of Duluth Planning Commission dated May 14, 2014, decided at the Planning Commission meeting held on May 13, 2014).

Comment: Page 24, Item 19c. Cumulative potential effects resulting in significant environmental effects will be discounted in order of list:

1) Increased water quality by changing "hydraulics" and calling it improvement is bogus. Eliminating 1,072 lineal feet of stream channel will result in the degradation described in the above discussion of Item 9b.

2) Improved opportunities for fish passage by placing two more culverts of undetermined design and questionable functionality cannot be proved.

3) Claiming decreased vehicle emissions as a result of this project when it will double the amount of railway that exists for double the amount of train traffic and justifying it as replacing over-the-road transportation is a red herring, diversion tactic.

4) Loss of 18 acres of forested habitat is an understatement.

5) Wetland mitigation does not work. We need these wetlands where they are in their already limited expanse on this steep site terrain. They have developed over time and space in equilibrium with the natural environment. Obviously, when you lose wetlands, you lose their function and value. There is a corresponding degradement in the water quality of the receiving water body they service. Contrary to this EAW statement; the long term, cumulative impacts of wetland loss are significant and detrimental to water quality.

Response: *These comments summarize opinions of the commenter that have been addressed by information previously provided by WCL and/or addressed in the response to previous comments (e.g., refer to the response to Linda Ross Sellner, Comment: Page 5, Item 6b).*

Letter from John L. Bergman dated June 6, 2014

Comment: I believe that Minnesota statutes require all public documents to have a glossary page in the frontispiece section of the document: That is sorely lacking. As evidence, I had to "dig" through the document to "find" full-word references to many of the acronyms used throughout.

Response: *The EAW was prepared and presented in a format that was provided by the City of Duluth. The documents prepared by WCL/Golder include the full name for each acronym the first time it is presented in the respective document (including this letter). A glossary of full names and acronyms will be prepared if required by the City of Duluth.*

Comment: Page 2, Item 5. Answer to "Site location maps..." tries to identify "...the two high value resource streams..."; please have them named in this paragraph. I can only insinuate (from other comments in the document) that the two streams are, indeed, Sargent's Creek, and Mission Creek; they are not specifically named here.

Response: *The two high value resource streams are the East Branch Mission Creek (Tributary #10 to Mission Creek) at MP 471.55 and Sargent Creek located at MP 470.31. These two locations are depicted on the Project Location Map (Figure 3) included with the EAW.*

Comment: Page 3, Item 6. Second answer paragraph where it textually limits the project's Northwest termination to being "...southeast.." of I-35, but goes on to identify "...Railroad MP [I (again) assume MilePost] 472.20..." This is inconsistent within itself because MP 472.20 is at Nopeming Junction which is a short distance Northwest of I-35; also, this is inconsistent with some of the project outline maps as presented in the EAW package (also showing the project extending to Nopeming Junction).

Response: *The project that is proposed in the JPA and covered by the EAW is, in fact, limited to the areas depicted on the Site Locator Map (Figure 2) and Project Location Map (Figure 3) included with the*

EAW. The project will be constructed in phases. Phase 1 will be that portion of the project east of the Munger Trail, and Phase 2 will be that portion west of Munger Trail and east of I-35.

Comment: Page 3, Item 6. Fourth answer paragraph addresses the removal and replacement of BR 468.05 at 108th Av (should be "...108th Av ***W***..), but does not at all address what is to happen to the bridge at BR 468.33 location. What is to become of it? Is it to be continued "in-use"? If not, is it also to be removed and reclaimed? I submit that, if it is to be abandoned, that it will become an "attractive nuisance" under the law: It should also be removed and reclaimed as for the existing BR 468.05.

Response: *The bridge at the 468.33 location will be removed. The existing superstructure will be removed once the new tracks are placed in service and trains are no longer need to operate over bridge 468.33.*

Comment: Page 4. Page 4 has numerous references to "...108th Av..." which should be "...108th Av W..." 4th answer paragraph says that one of the new bridges over Commonwealth Av [100th Av W, MN Hwy 23] "...will be located north..." of the old existing bridge, yet the project outline maps of Figure 5e show the northern boundary of the project not to be inclusive of that area: That map is not accurate.

Response: *The proposed track on the north side of the existing bridge over Commonwealth Avenue is depicted on the Project Location Map (Figure 3) included in the EAW. WCL understands this may be difficult to see in a photocopy or reduced copy of the map. However, this feature is evident upon review of the electronic (PDF) copy of the map. The area is also depicted on the project plans included with the JPA.*

Comment: Page 4. Fifth and sixth answer paragraphs talk about Munger Trail crossing bridges over the new proposed trackage, but do not state how wide: Are the bridges' widths going to be acceptable to the public which uses them? Has this issue been publicly, locally, and widely discussed?

Response: *WCL has been working with the MnDNR and State Historic Preservation Office (SHPO) to address the Munger Trail crossing. The crossing has been/will be designed to meet requirements of the MnDNR, which will ensure there is reasonable opportunity for continued use by the public without any limitations beyond those that may be present at the current crossing. Both the trail alignment and proposed bridge structure have been designed in accordance with the MnDNR Trail Bridge Requirements dated January 29, 2014.*

Comment: Page 5. Second answer paragraph (and elsewhere following) mentions "Beck..." road. This is a simple mistake, but important to our local area: It is ***Becks*** road, named after one of the earlier St. Louis County Commissioners who was instrumental in having the road first constructed; his surname is Becks (with the "s").

Response: *WCL acknowledges this is important to local residents and will refer to the road as Becks Road. WCL will not revise previously submitted information.*

Comment: Page 8, Item 6d. First answer paragraph makes a statement about "...the compensated grade..." of 2 percent this needs to be defined, as the previous sentences mention grades of from 1.50 to 1.90 percent.

Response: *The existing track profile (vertical alignment) varies from 1.50 percent to 1.90 percent. The compensated grade takes into account the horizontal grade and determines the total resistance of a train on a horizontal curve on a gradient. For the existing track, the compensated grade is 2.10 percent.*

Comment: Page 9, Item 6e. First answer paragraph states "...that Phase 1 would be completed during the 2014 construction season." Between the EAW public commentary constraints of 30 days, the Commentary reviews, and any further action which may need to be taken in those regards; this leaves very little time during 2014: This is what leads me to the conclusion that this project is on a "fast-track",

and being "railroaded". I do not see that any other conclusion can be reached as to the public's involvement and interests.

Response: *WCL is aware of the narrowing window for construction during the 2014 season and is prepared to begin and complete the work on an expedited schedule once the appropriate approvals have been obtained. WCL has endeavored to provide information needed for regulatory review in a timely manner to facilitate agency review and actions to meet this goal.*

Comment: Page 11, Item 9aii. First City of Duluth answer paragraph near bottom of the page (and elsewhere following) uses the "word" "*Orientated*" which is an archaic spelling of the word "Oriented" used elsewhere in the document.

Response: *WCL will refrain from addressing this comment as it pertains to a document that WCL has no control over.*

Comment: Page 13, Item 9b. Second answer paragraph mentions that the Munger Trail follows the former St. Paul & Duluth and BN railroad grade between Carlton and western Duluth. Should it not also mention its third name: "Short-Line Railroad"?

Response: *WCL is of the opinion that the reference to the St. Paul & Duluth and BN railroad grade provided in the EAW is sufficient for readers of the EAW to understand what is being referred to.*

Comment: Page 13, Item 9b. Fifth answer tries to put a good "spin" on the project not significantly affecting nearby land use beyond that already existing. This project is being proposed to enable the railroad to open-up a bottleneck in order to substantially increase throughput of railroad traffic to dramatically increase freight shipping. There is no other operational advantage to the railroad to spend millions of dollars on this "upgrade". This will mean a substantial increase in Railroad traffic with its substantial concomitant increase in noise pollution from grade-crossing whistle blowing 24 hours/7 days a week all year. It will also have a substantial negative impact on North Cloquet Road and Midway Road emergency services and automotive-type road traffic; especially for those of us folks living in proximity and using those roads daily. Since CN bought-out the DM&IR trackage, the delays have already substantially increased due to the presently increased train traffic; this project will only serve to again increase it much more. I would suggest that both Carlton and St. Louis Counties work with CN to find ways (including additional road bridge building over the Railroad) at all four sites to alleviate these very serious negative issues for Midway and Thomson Townships and the Adolph crossings, in particular.

Response: *WCL will build approximately 4-1/2 miles of double track on Steelton Hill to alleviate a rail traffic bottleneck and improve the efficiency of freight train operations through WCL's Proctor-Duluth corridor. The project will essentially add a passing lane on WCL's busy freight corridor and is designed to reduce and eliminate congestion faced by the 20 to 25 freight trains that operate through the area each day. This improvement will allow existing freight traffic to move through northern Minnesota and northern Wisconsin more efficiently reducing delays in locations across the region caused by trains operating through Steelton Hill.*

Comment: Page 14, Item 10a. Answer paragraph mentions that there are no known "...unconfined/shallow aquifers...": There is one that I know of which has been a concern for the previous DM&IR and present CN owners for years just east of the 108th Av W bridge. There is a definite awareness as both owners have done extensive drainage work in that area which includes what I would call "quicksand" drainage out of the south embankment of the existing Railroad (RR) ROW.

Response: *WCL is aware of and has addressed the unstable soil in the area east of 108th Avenue with a Soldier Pile Tie-Back Wall Stabilization System. Survey, jetting, and repair of the horizontal drains and erosion control at the toe of the slope where the horizontal drains daylight has been recommended as a portion of the Soldier Pile Tie-Back Wall Stabilization scope of work. This area will be stabilized and drained as a result of the project, reducing the potential for slope failure and subsequent impacts to the stream (US Steel Creek).*

Comment: Page 16, Item 10b. Second answer paragraph: "***contractor***" is misspelled as "contactor".

Response: *So noted.*

Comment: Page 17, Item 11aii. Answer paragraph states that no nearby water wells were identified: A simple look at each residential site along the route will identify many water wells "nearby". What defines "nearby"? Why are these not identified by personal survey? There are at least two residential water wells "near" 108th Av W, and many more near Ely's peak in the Shortline Park neighborhood of Duluth, plus more along Becks Road toward I-35. It also states the "...depth to groundwater ***various***..." which, I must assume, is a misspelling of ***varies.***

Response: *In providing the response to the EAW, WCL acted in good faith and relied on publicly available information from the Minnesota Department of Health County Well Index database. WCL cannot be held responsible for the quality of information in the county well index. With respect to the word "various", the commenter is correct in citing this as a misspelling of "varies".*

Comment: Page 17, Item 11bii. Answer paragraph mentions "...Sargent..." creek, which should be spelled as ***Sargent's*** creek (add the ***s***).

Response: *So noted.*

Comment: Page 18, Item 11biii. Answer paragraph again states no nearby wells: Please see comments in my #15 above.

Response: *Refer to response to Comment: Page 17, Item 11aii.*

Comment: Page 19, Item 12a. Answer says "Not Applicable." This is in serious error, as the north bridge crossing at Commonwealth Avenue on its eastern end is proposed to be constructed on property that was a previous Minnesota Power & Light electrical utility substation for many decades: Thus, it is highly probable to contain contaminants such as Poly-Chlorinated Biphenols (PCBs) which were a component of electrical power transformers and switch-gear for many decades too. Part of this property was also part of the old United States Steel Universal Atlas Cement manufacturing plant and may have additional pollution related to that operation.

Response: *WCL is not aware of any specific studies or evaluations that have identified hazardous substances at the site. If the commenter is aware of such studies and can provide information that would, in fact, demonstrate the presence of contaminants on the site, WCL would appreciate the disclosure of such information. In the event any portion of the site is known to be impacted by contaminant substances above applicable regulatory agency exposure or cleanup criteria, WCL will address the presence of such contamination by implementing appropriate engineering (design) controls and work procedures.*

Comment: Page 20, Item 12d. Answer says "Not Applicable. There will be no...generated" NO ONE can ever make an honest statement of this sort without being an arrogant fool! What will be done if there IS a problem??? This needs a real answer!

Response: *The EAW indicated there will be no <u>significant quantities</u> of hazardous waste generated on the site during construction. It is understood that waste will be generated, and some materials in the waste stream may be considered hazardous in quantity and/or if disposed of improperly. However, waste generated during construction activities will be minimal and consistent with standard construction projects. The waste generated on-site will be placed in appropriate containers and hauled off-site for disposal at an appropriate landfill designated to receive non-hazardous waste (i.e., the waste will not be considered "hazardous"). Waste handling and potential spills of waste material and/or hazardous substances will be addressed by following conditions of the construction stormwater permit and procedures of the SWPPP.*

Comment: Page 23, Item 17. Answer does not at all address the future and continuing substantially increased operational noise as I mentioned in my point #12 above. It only addresses construction noise. It requires operational noise to also be addressed in detail: Proposed future increased daily, weekly, yearly RR traffic on each of the two tracks fed Northerly of Nopeming Junction-- what is projected for the next ten to twenty years? The RR knows this: They wouldn't make such a substantial investment in this "upgrade" without having "run the numbers".

Response: *The double track project will reduce the delays incurred by freight trains that now must stage to the north and south of Steelton Hill, while other trains operate through the single track corridor. This infrastructure investment improves the efficiency of the state's transportation infrastructure by reducing the time all trains must stage in areas across northern Minnesota. As in any location along the railroad network, future growth in train traffic will be dependent on economic conditions.*

Comment: Page 23, Item 18a. Answer does not address disruption of public parking at Ely's Peak and Munger Trail use along the construction route during the summer construction season. This has the potential to seriously impact trail traffic and use with its concomitant impact on both the public and public-dependent business that relies upon that traffic. Is the RR planning to establish nearby detour routes so that the Munger and Mission Trails are able to remain open at all times? Can the additional Munger Trail bridge be built on the level with the trail and excavated later for the RR so that the trail is not interrupted? This question is also applicable to the other trail bridge replacements, as well. What about detour of local traffic for the 108th Av W bridge replacement and demolition/reclamation? Specifically, how/what plans are there to accommodate each and all of these issues?

Response: *To protect pedestrians that may try to use the trails during construction and facilitate a reasonable work schedule, both the Munger Trail and Mission Creek Trail will be closed for some time during construction. The details of the closures have been and continue to be coordinated with both the MnDNR and City of Duluth, respectively. With regard to the 108th Avenue W bridge work, 108th Avenue W will remain open with the exception of three overnight outages. The specific dates for these outages are not known. However, they will be coordinated with local authorities to provide as much advance notice as possible and minimize impacts to local road travel.*

Comment: Page 23, Item 18b. Does not present the traffic statistics to justify the "Not Applicable" answer. How does the public "know" that this is not applicable per Minnesota requirements? Please publish the statistics.

Response: *Per the Minnesota Department of Transportation (Mn/DOT) Access Management Manual, Chapter 5, Section 5.3; a traffic impact study is not necessary for developments that do not generate significant traffic volumes. Since the proposed project will not generate any new or increased traffic on public roads, a traffic study is not required.*

Comment: Page 23, Item 18c. Does not answer any question as to how roadway or trail blocking (even temporary) will be handled. Please give specific plan answers to this question for both trail and roadway use. Undoubtedly, Commonwealth Av and parts of the Munger Trail as well as the Becks Road overpass will need to be blocked many times during construction of the various bridges/ RR underpasses.

Response: *As indicated in the response to Page 23, Item A, both the Munger Trail and Mission Creek Trail will be closed for some time during construction to protect pedestrians that may try to use the trails during construction and facilitate a reasonable work schedule. The details of the closures have been and continue to be coordinated with both the MnDNR and City of Duluth, respectively. Becks Road will remain open throughout construction activities. 108th Avenue W will remain open with the exception of three overnight outages. Commonwealth Avenue will remain open with the exception of two overnight outages; one outage for when the existing superstructure is removed and the other when the proposed superstructure is set into place.*

Comment: Page 24, Item 19b. Answer shows "Unknown." It is very apparent that the future would most probably include another (2nd) RR bridge over I-35. Various inconsistent statements and plan drawings throughout the EAW answers (see my Item #3 above) can only lead to this conclusion. Additionally, it makes no common, practical, or economic sense to not construct another bridge over I-35 in the future, as this will be the only "bottleneck" between Steelton Yards and the two individual existing track lines fed-to at Nopeming Junction. It may not be economically feasible presently, but is surely already "on the drawing-boards" as indicated by the previously-mentioned EAW plan and drawing inconsistencies which DO indicate such an additional bridge. In addition, I expect that the CN RR may also opt to upgrade the Oliver Bridge back to its original two-track service from Steelton to Oliver and beyond to their Pokegama Yards.

Response: *Subsequent to the preparation and submittal of the EAW, WCL has considered a longer range plan to extend the double track across (west of) I-35. This was presented to the USACE, MnDNR, and City of Duluth in a letter dated April 16, 2014 (i.e., Permit Application Addendum No. 1). A copy of that letter is attached. If completed, that portion of the double track crossing I-35 will be considered Phase 3. Phase 3 is an independent action from the activities presented in the initial JPA and this EAW.*

Comment: Page 24, Item 20. Shows no answer whatsoever; if nothing else, it should at least show "Not Applicable".

Response: *Not applicable.*

Letter from the Minnesota Department of Natural Resources (MnDNR) dated June 10, 2014

Comment: The MnDNR recognizes that WCL (CN) has worked with us to accommodate high value streams with redesign alternatives; however, we have concerns with the standard directional boring approach. There may be significant stream realignment, and the resulting crossings will likely not provide fish passage and water quality improvement or stream benefits as suggested. The MnDNR will address more details in the upcoming Public Waters Permit and would appreciate the opportunity to be involved in pre-construction meetings to discuss alignments and construction ideas or designs.

Response: *As discussed during a site visit with MnDNR staff on May 29, 2014, WCL will continue to work with the MnDNR to address the issue of directional boring (a.k.a. jack-and-bore) techniques and placement/alignment of the replacement culverts.*

Jack-and-bore is considered one of the methods having minimal impacts to wetlands and aquatic resources when conditions are conducive, as in cohesive soil such as that located on the site. Since it requires minimal open cutting and, in this case, no stream diversions; the potential for soil erosion and sedimentation into the aquatic resources is minimized. Pipe installation using jack-and-bore techniques is often required by regulatory agencies when feasible to minimize impacts to wetlands and/or streams. When properly implemented, jack-and-bore can be used to install pipes with precision as tight as 0.25 feet (i.e., within 2 to 3 inches). The limiting factor will most often be where the jack-and-bore pits can be installed to accommodate the boring equipment and feed pipe. In some circumstances, the presence of a boulder or bedrock outcrop may limit the ability of the equipment to push the pipe to the desired location. In that case, alternatives will be considered and a new bore pit and/or pipe alignment may be required.

The following is a general description of the procedure associated with the jack-and-bore technique. The process begins with clearing vegetation and preparing the specific work site where jack-and-bore equipment will be staged. The first step after clearing and preparation is to dig a bore pit on one side and a receiving pit on the other side. These pits need to be approximately two feet deeper than the depth of the proposed pipe. The bore pits will be approximately 10 to 15 feet wide and 50 feet long. A sheet steel wall may be used to form the back side of the bore pit to provide a firm surface to push against. The receiving pit will not need to be larger than 10 by 10 feet at the bottom of the pit. The next step is to lower the boring equipment into the launch pit along with the first joint

of pipe. The boring machine augers a hole and, at the same time, pushes the pipe through it, one length at a time. Pipe sections are welded together as they are pushed through the embankment.

The following general construction guidelines will apply to the installation of culverts using the jack-and-bore technique:

- *Construction will be performed during periods of lowest sensitivity*
- *Trenching will be done perpendicular to the stream*
- *The construction time and clearing of vegetation will be minimized*
- *Standard erosion and sediment control measures will be used, and spill prevention BMPs will be followed during construction*
- *Debris incidentally introduced into streams will be promptly removed*
- *All other appropriate BMPs will be followed*
- *Temporary impacts to stream banks, vegetation, and streambeds will be restored immediately after construction*

During the May 29, 2014 site visit, WCL and the MnDNR made a verbal agreement that the MnDNR permit will include a condition that requires WCL to hold a pre-construction site meeting with MnDNR staff at Public Waters crossings and stream locations in which fish passage is required before installing the jack-and-bore pits and/or beginning work in the streams. The purpose of the pre-construction meeting will be to select the most appropriate alignment for the replacement culverts and location for the jack-and-bore pits.

Letter from the MPCA dated June 11, 2014

Comment: Item 8. As indicated, the project will require coverage under a National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater General Permit. However, the EAW does not clearly state the total disturbance (Item 6c states the project magnitude equals 46 acres, and Item 7 states the total project area by cover type equals 75 acres). For projects that disturb 50 acres or more and have a discharge point within a mile of and flows to a special water (this includes Sargent Creek and Mission Creek), the owner and operator must submit the application and SWPPP to the MPCA at least 30 days before the start of construction activity. Given the topographic setting of the project, the fourteen stream crossings, and the potential disturbance nearing fifty acres; MPCA staff encourages the project proposer to consider submitting their application and SWPPP for review.

Response: *Since submittal of the EAW, WCL has submitted a Construction Stormwater Permit Application to the MPCA and obtained coverage under the NPDES/State Disposal System General Permit MNR100001 (i.e., Permit No. C000338173). A copy of the MPCA Coverage Card is attached. A draft SWPPP was included with the initial JPA. A final SWPPP has been prepared and will be provided for review by permitting agencies (i.e., USACE, MnDNR, and City of Minnesota Board of Soil and Water Resources (BWSR) via City of Duluth and MPCA).*

Comment: Item 11. Please note that Sargent Creek is listed on the MPCA's Impaired Waters (303(d)) List for impairments to aquatic recreation due to *Escherichia coli* . It is not anticipated that this Project or construction activities will contribute to or exacerbate this impairment.

Response: *WCL appreciates this comment and offers no response at this time.*

Comment: Item 12b. Wastes generated from the project, including materials from the track realignment (track, ties, plates, and spikes) and from the bridges that will be removed from over U.S. Steel Creek and

Commonwealth Avenue (bridge superstructure) should be managed according to Minnesota Solid Waste and Hazardous Waste rules.

Response: *WCL understands this and will manage project waste in accordance with Minnesota Solid Waste and Hazardous Waste rules and guidance.*

Comment: As noted in the EAW, the project has 14 water crossings. Two of them are trout streams and several other are unnamed tributaries to the trout streams. These tributaries need to be treated in the same manner as the trout streams. At this point, only a general statement saying they will follow the BMPs from the MnDNR for high resource value streams exists. More specifics are needed, including the process for the removal of at least one crossing.

Response: *WCL has been in communication with the MnDNR to address the presence of trout streams on the site. WCL has identified and confirmed with the MnDNR which stream crossing locations fish passage will be required, and has revised the project plans to avoid impacts/modifications to the existing stream crossings in those locations. The revised plans for these locations were provided to the MnDNR and others on April 21, 2014 and June 26, 2014. They are currently available for review on the MPARS (i.e., MPARS Permit Application No. 2014-1619).*

The general procedure for culvert replacements was presented in the initial JPA. The following is a condensed excerpt from the JPA regarding removal of a typical culvert.

Once the new culvert is installed and the end sections stabilized, the existing culvert will be plugged at the downstream limits and abandoned in place by grouting the entire length of the culvert. Protruding end sections and/or culvert headwalls from the abandoned culverts will be removed. The final means and methods may vary depending on contractor selection. However, it is understood that all work associated with culvert installation and restoration of temporarily disturbed areas will be performed in accordance with guidance in the MnDNR Best Practices Manual.

Letter from the State Historic Preservation Office dated June 4, 2014

The SHPO confirmed that they received the EAW for the project. They indicated that the project requires a USACE permit, and that cultural resource surveys have been completed. They indicated that they look forward to receiving and reviewing the completed survey reports and will be consulting with the federal agency (USACE) regarding the required Section 106 review.

Response: *Subsequent to the date of the SHPO letter, the USACE did provide the cultural resource survey reports prepared for the project to the SHPO. WCL has not been invited to deal directly with the SHPO, as their review is coordinated between the USACE and SHPO offices. However, WCL has contacted the SHPO to ensure they have the most recent documents available. As of the date of this letter, WCL understands that the SHPO continues to coordinate with the USACE.*

Closing

WCL/Golder assumes the above information will allow you to continue your review of the proposed activities. WCL/Golder understands the City will act on the EAW during the regularly scheduled Planning Commission meeting on July 8, 2014. Representatives of WCL and Golder will attend that meeting. To facilitate your review and approval, WCL/Golder would be pleased to meet and/or consult with you and/or other regulatory agency staff to discuss proposed activities and address questions you may have prior to the meeting.

WCL/Golder appreciates your cooperation and looks forward to approval of the EAW and proposed project. If you have questions, please contact us at (989) 439-1070.

Respectfully,

GOLDER ASSOCIATES INC.

Brian Huebner
Senior Project Ecologist

John Puls
Senior Project Engineer

Attachments: Revised Wetland Maps
Revised Project Plans
MPCA Coverage Card
Permit Application Addendum No. 1 dated April 16, 2014

cc: Steve Robertson; City of Duluth
Daryl Wierzbinski; US Army Corps of Engineers
Patricia Fowler; MnDNR
Justin Trush; Wisconsin Central Ltd.
Kari Harris; Wisconsin Central Ltd.
Mike Kunz; Alfred Benesch

PERMIT APPLICATION ADDENDUM NO. 1
DATED APRIL 16, 2014

April 16, 2014 1303084

Mr. Daryl W. Wierzbinski
Lead Project Manager
US Army Corps of Engineers
1554 Highway 2, Suite 2
Two Harbors, MN 55616

Ms. Patricia Fowler
Minnesota Department of Natural Resources
Ecological and Water Resources
1568 Highway 2
Two Harbors, MN 55616

Mr. Steven Robertson
City Hall
411 West First Street #402
Duluth, Minnesota 55802

RE: PERMIT APPLICATION ADDENDUM NO. 1
STEELTON HILL DOUBLE TRACK
CITY OF DULUTH, MINNESOTA

Dear Mr. Wierzbinski, Ms. Fowler and Mr. Robertson:

On behalf of Wisconsin Central Ltd. (WCL) (project owner/applicant), Golder Associates Inc. (Golder) respectfully submits this letter regarding the proposed project. The purpose of this letter is to inform your offices of a recent change in the extent of the proposed Steelton Hill Project. This letter and accompanying information shall serve as an addendum (i.e., Addendum No. 1) to the Joint Permit Application that was submitted to each of your offices on February 17, 2014.

Upon careful consideration of the proposed project, current and projected rail use, WCL has determined that the Steelton Hill project will include a new double track being constructed from the current Phase 2 limits to Nopeming Junction which is located north of Interstate I-35 (I-35). This will be referred to as Phase 3. Please refer to the attached Project Location Map.

Phase 3 of the WCL Steelton Hill project involves extending the proposed Steelton Hill Double Track north approximately 1,500' from I-35 (MP 472.20) to Nopeming Junction (MP 472.48). This construction will provide a double track mainline from Nopeming Junction (where the WCL Rainy Subdivision and Superior Subdivision currently merge together into a single mainline track) to Steelton Yard. To accommodate the proposed second mainline track, a new railroad bridge will need to be constructed over I-35. The new structure will be constructed 35 feet west of the existing railroad bridge and will also be a single track structure. Once all three phases of the Steelton Hill project are complete, WCL will have two mainline tracks on Steelton Hill which will significantly increase the train capacity and train speeds on Steelton Hill. Work activities associated with Phase 3 would be very similar to those described in the initial application.

Phase 3 would involve impacts to three small wetland areas totaling approximately 0.167 acres and two watercourses; 1 ephemeral and 1 ephemeral/intermittent, totaling approximately 305 lineal feet (LF). Neither of the watercourses are mapped as Minnesota Public Waters nor are they located within a designated 100-year flood zone.

The following is a summary of the additional wetland and stream impacts expected in Phase 3.

Wetland U = 0.057 Acres
Wetland G = 0.02 Acres
Wetland F = 0.09 Acres

Stream N = 105 LF
Stream M = 200 LF

Please note these impacts are preliminary estimates. Once a design plan has been completed, revised plan drawings will be provided along with details regarding the watercourse crossings and wetland impact areas, including hydraulic calculations for the watercourse crossings (i.e., Structure Replacement Recommendation Reports). In addition, Table 1: Summary of Culvert/Watercourse Crossings and Table 2: Description of Wetland Impacts will be updated and provided to your offices.

Due to the size and complexity of the project, Phase 3 is planned for construction following Phase 2. No specific date has been set. Depending on responses from various permitting agencies and allocation of WCL financial resources, Phase 3 may be constructed immediately after Phase 2 or may not be initiated for 1 to 5 years after Phase 2.

Although Phase 3 is part of the same linear railway, the purpose of the Phase 3 activities is to provide access across I-35 and tie into an existing junction between two rail lines operated by WCL (Superior & Rainy Subdivisions). If possible, WCL/Golder respectfully requests your office consider the project as an independent action from Phases 1 and 2 as WCL does not want the addition of the Phase 3 project activities to delay the review and approval process for Phases 1 and 2. With respect to timing of permit approvals, WCL respectfully requests that your office issue approval for Phase 1 and 2 prior to Phase 3, understanding that all necessary permits and approvals from other regulatory agencies will be required before work can begin in regulated areas (refer to the letter regarding acknowledgment of Phases 1 and 2 approach submitted to your office and dated April 15, 2014).

WCL/Golder understands the USACE is in the process of issuing a public notice for the Phase 1 and 2 portions as described in the initial application. If necessary, please use the information in this letter to amend your description of the public notice to reflect Phase 3. Provided WCL's transparency on Phase 3, we respectfully request that the amendment be included and the public notice be submitted by April 25, 2014. However, if this project can be considered an independent action, WCL/Golder respectfully requests that your office issue the public notice without delay using the information included with the initial submittal.

Please forward this letter to all appropriate persons within your offices. WCL/Golder appreciates your continued cooperation and look forward to your approval of the proposed project. If you have questions or should you require additional information, please contact us at (989) 439-1070.

Respectfully,
GOLDER ASSOCIATES INC.

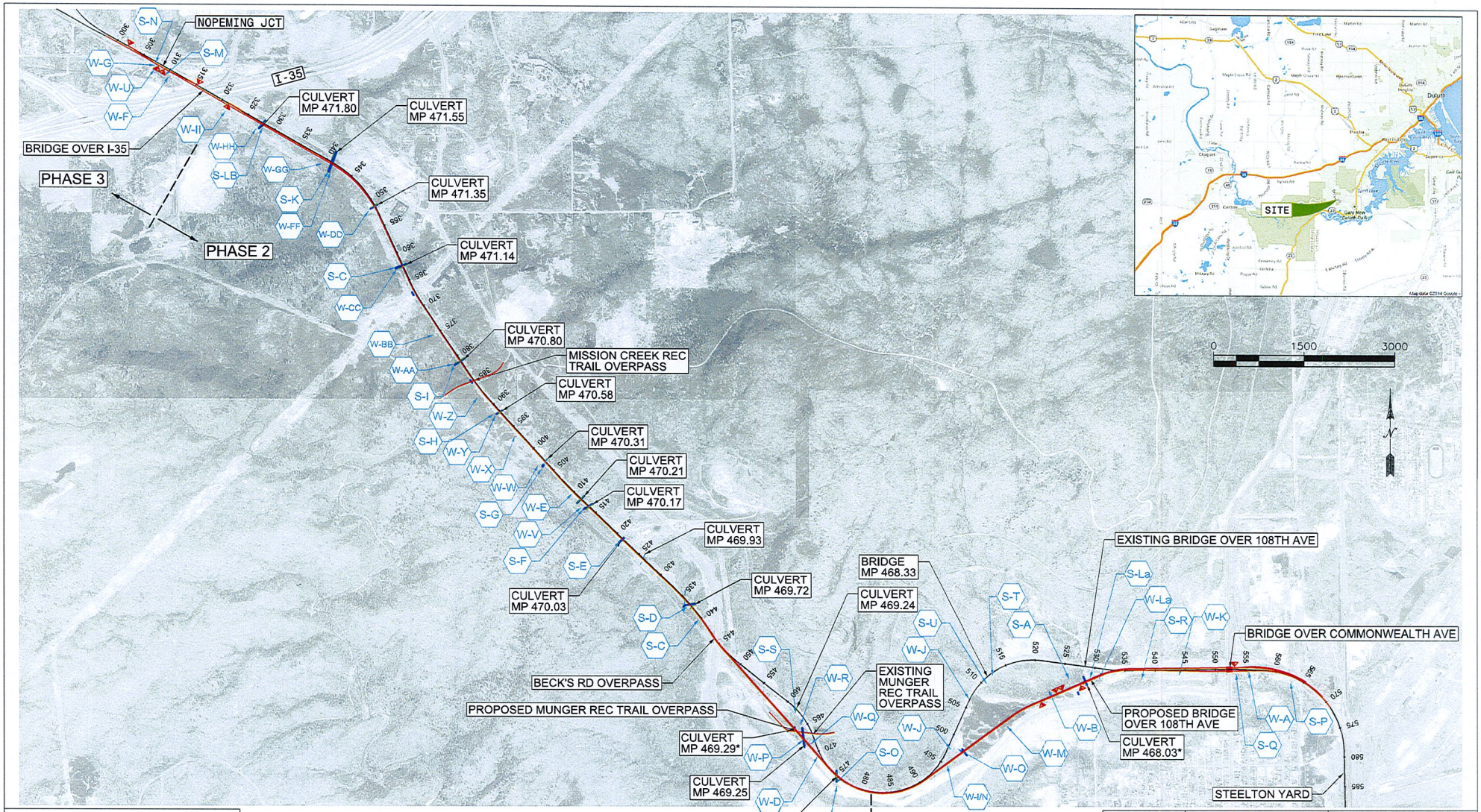
Brian Huebner
Senior Project Ecologist

John Puls, P.E.
Senior Project Engineer

Attachment: Project Location Map

cc: Justin Trush; WCL
Mike Kunz; Benesch

Golder Associates Inc.
15851 South US 27, Suite 50
Lansing, MI 48906 USA
Tel: (517) 482-2262 Fax: (517) 482-2460 www.golder.com



benesch
engineers · scientists · planners
Alfred Benesch & Company
4633 Washington Road
Kenosha, Wisconsin 53144
262-652-6677 Job No. 20171.00

REVISIONS	
DATE	BY
APPROVALS	
SHEET OF	

CN SOUTHERN REGION

WISCONSIN CENTRAL LTD
NORTH DIVISION
SUPERIOR SUB
STEELTON, MN

PROJECT LOCATION MAP

OFFICE OF DESIGN & CONSTRUCTION

DRAWN BY: BJW	SCALE: 1:1500	DWG NO:
CHECKED BY:	DATE: 4/16/2014	FILE: ACOE Overview.dgn

Y:\kenosha\20100S\20171.00\Eng_Docs\Exhibits\ACOE Overview.dgn

Minnesota Pollution Control Agency

Coverage Card

Construction Stormwater
National Pollutant Discharge Elimination System/State Disposal System General Permit MNR100001

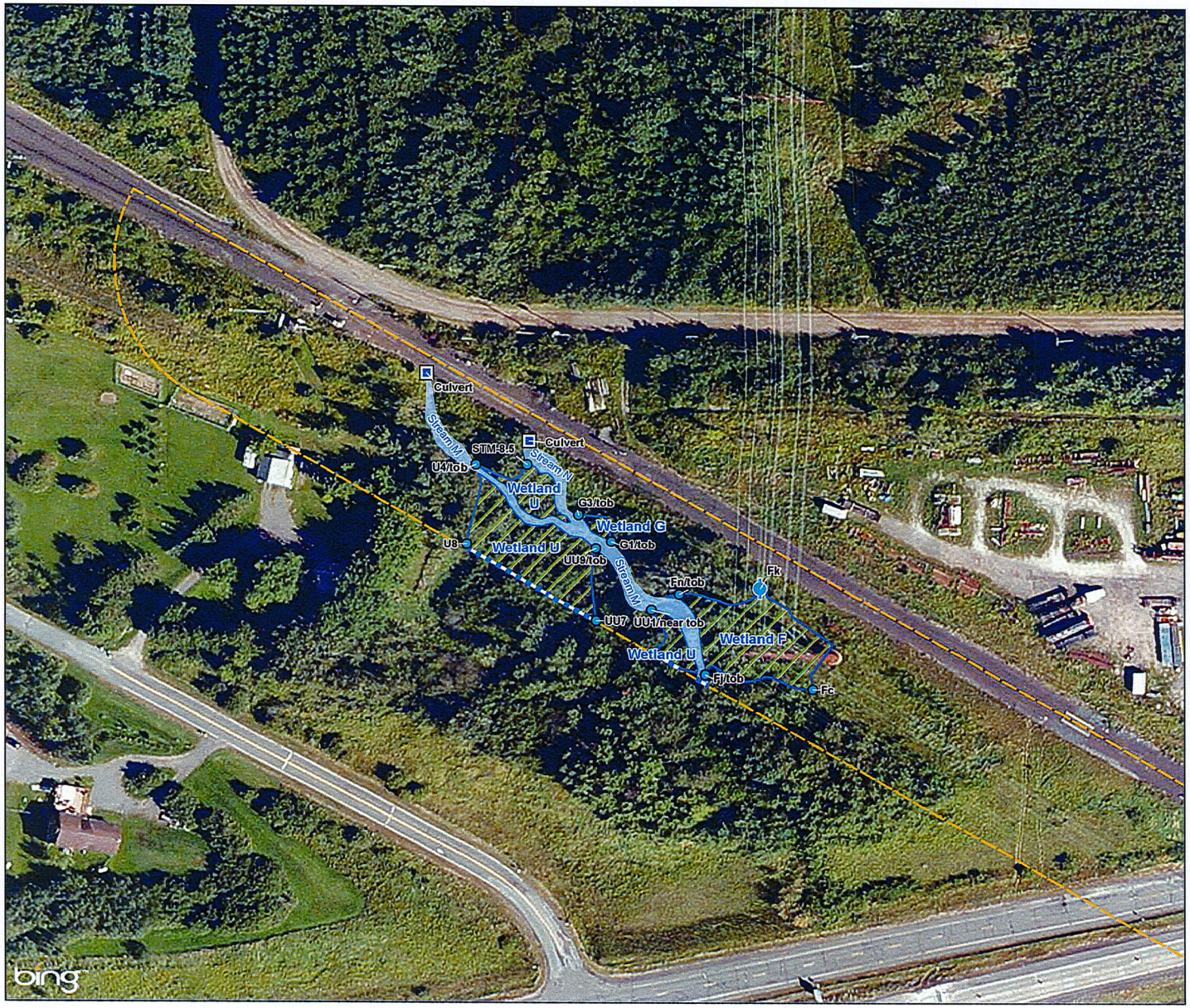
The Construction site identified below is covered under the National Pollutant Discharge Elimination System/State Disposal System General Permit MNR100001 and is authorized by the Minnesota Pollution Control Agency (MPCA) to discharge stormwater associated with construction activities.

Permit ID Number: C00038173
Owner: Wisconsin Central Ltd
General Contractor: Wisconsin Central Ltd
Project Name: Steelton Hill CSW

Permit Coverage Date: 5/29/2014

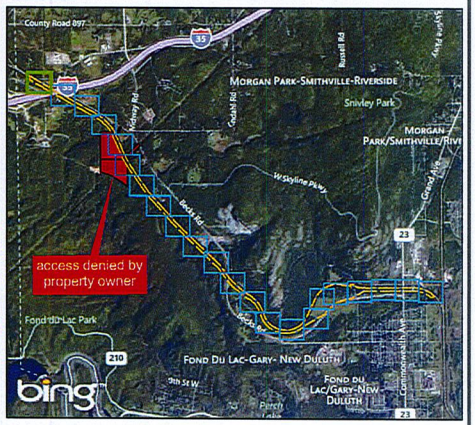
If you have questions regarding the stormwater program for construction activity, please access the MPCA Stormwater website at http:www.pca.state.mn.us/stormwater, or call the Construction Stormwater Program at 651-757-2119 or toll free at 800-657-3804.

REVISED WETLAND MAPS



LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- WETLAND/STREAM CONTINUES BEYOND EXTENT OF DELINEATION



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

0 50 100 200 FEET

1 INCH = 100 FEET

PROJECT

WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE

WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN
GIS	KJC	6/3/2014	REV	1
CHECK	BH	6/3/2014		
REVIEW	KT	6/3/2014		

FIGURE 2A

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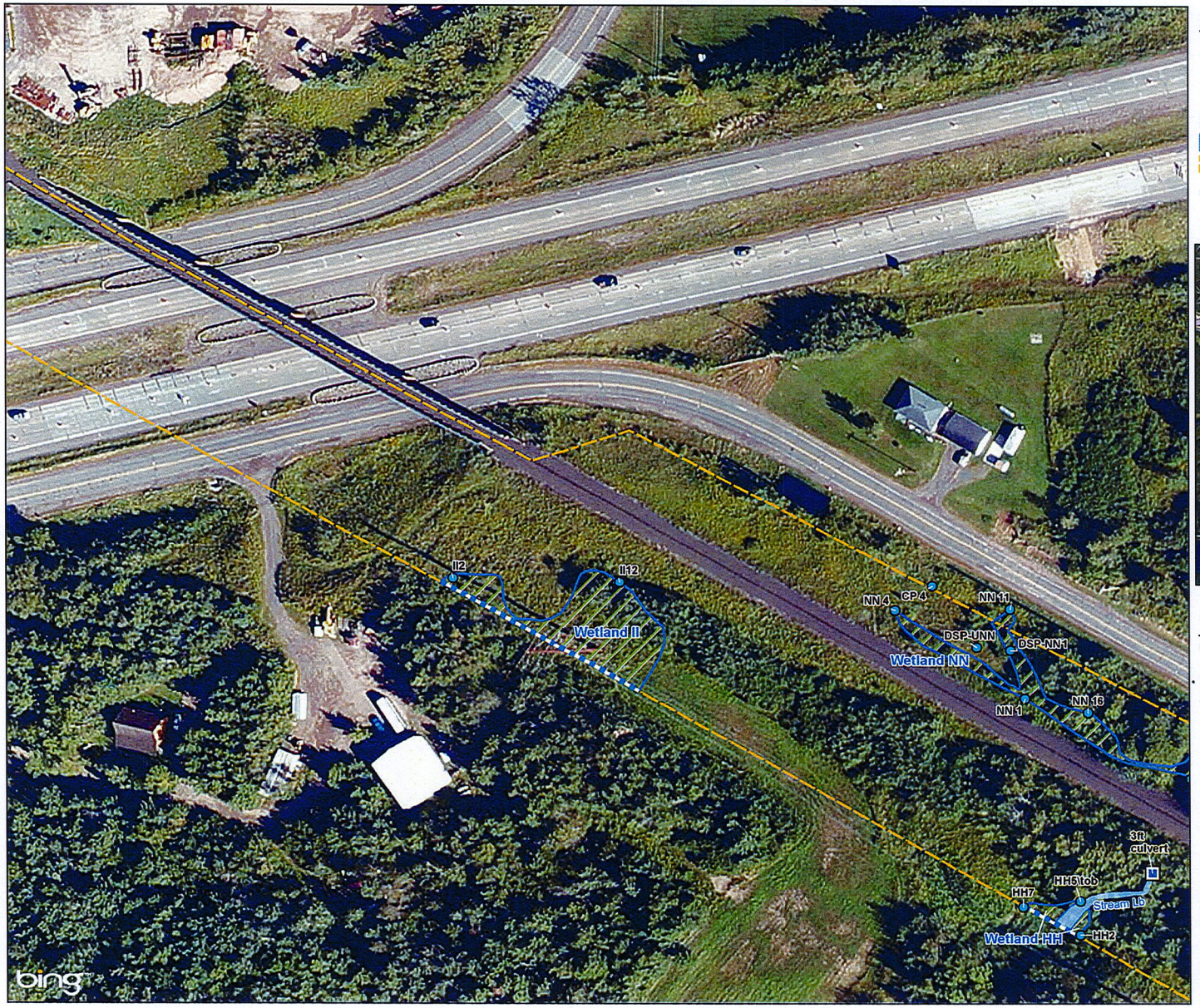
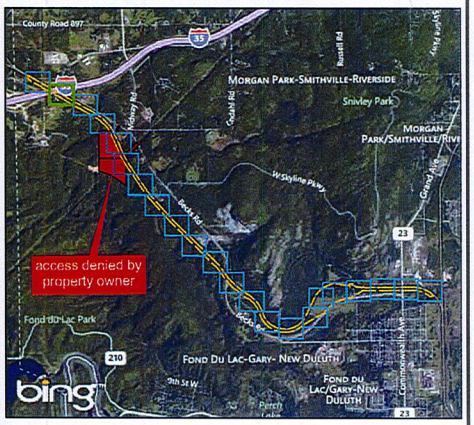


LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- WETLAND/STREAM CONTINUES BEYOND EXTENT OF DELINEATION



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

0 50 100 200 FEET

1 INCH = 100 FEET

PROJECT

WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE

WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd	
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GIS	KJC	6/3/2014			
CHECK	BH	6/3/2014			
REVIEW	KT	6/3/2014			

FIGURE 2B

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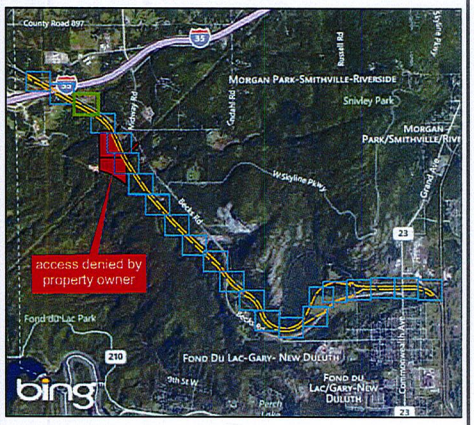
LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

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0 50 100 200 FEET

1 INCH = 100 FEET

PROJECT

WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE

WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd	
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN	REV 1
GIS	KJC	6/3/2014			
CHECK	BH	6/3/2014			
REVIEW	KT	6/3/2014			

FIGURE 2C

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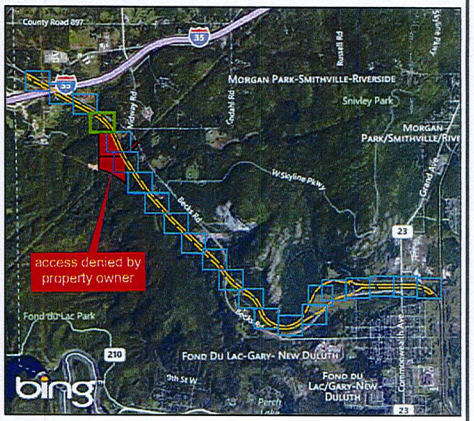
LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- WETLAND/STREAM CONTINUES BEYOND EXTENT OF DELINEATION
- ACCESS TO THIS PROPERTY WAS DENIED BY THE OWNER



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

0 50 100 200 FEET

1 INCH = 100 FEET

PROJECT

WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE

WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd
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CHECK	BH	6/3/2014		
REVIEW	KT	6/3/2014		

FIGURE 2D

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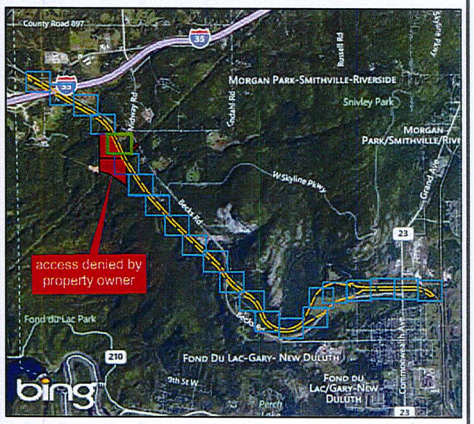
LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- WETLAND BOUNDARY ESTIMATED FROM SITE AERIAL – DID NOT ACCESS PROPERTY
- APPROXIMATE LIMITS OF THE SITE
- WETLAND/STREAM CONTINUES BEYOND EXTENT OF DELINEATION
- ACCESS TO THIS PROPERTY WAS DENIED BY THE OWNER



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

0 50 100 200
FEET

1 INCH = 100 FEET

PROJECT
WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE
WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd	
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN	REV 1
GIS	KJC	6/3/2014			
CHECK	BH	6/3/2014			
REVIEW	KT	6/3/2014			

FIGURE 2E

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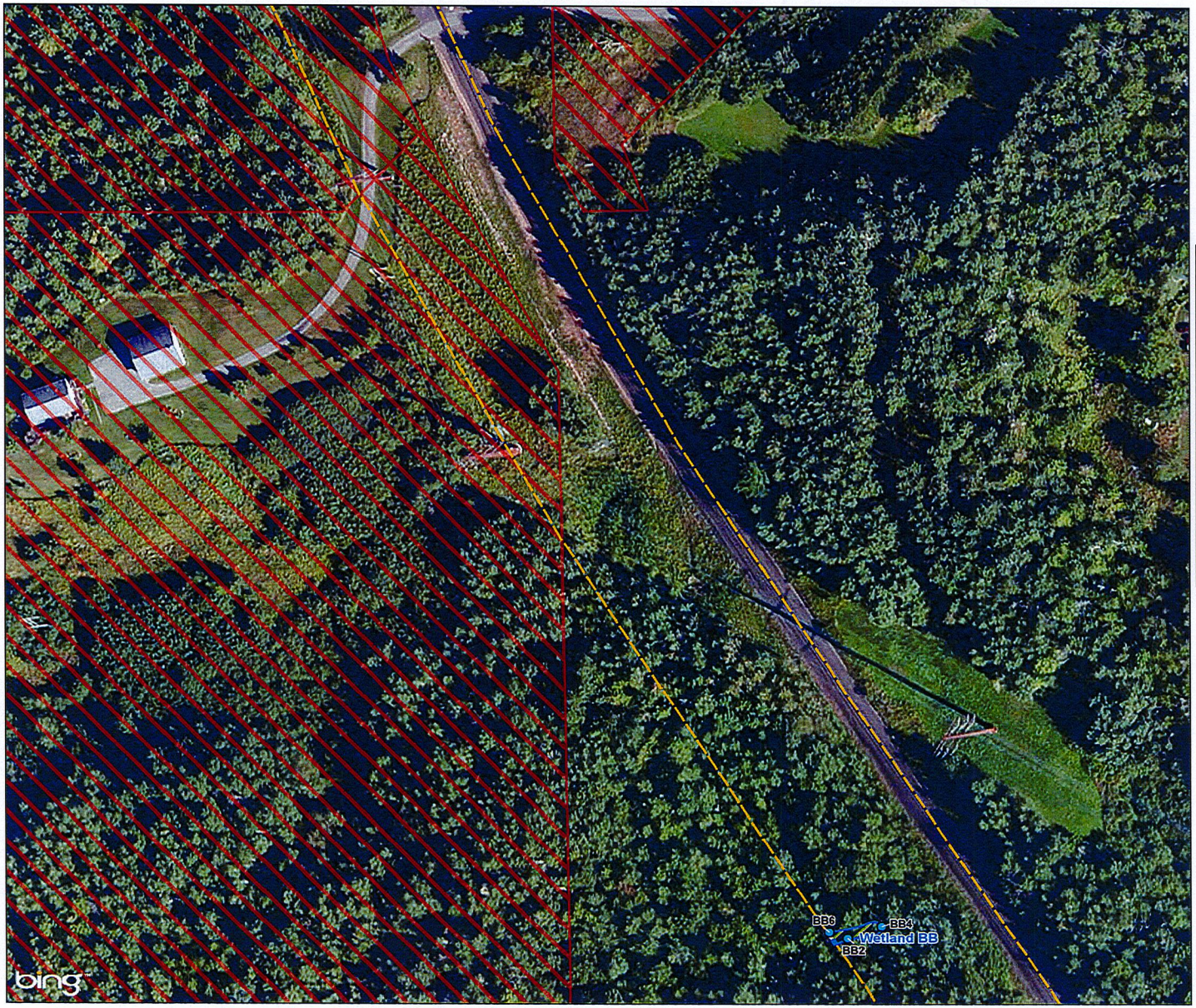
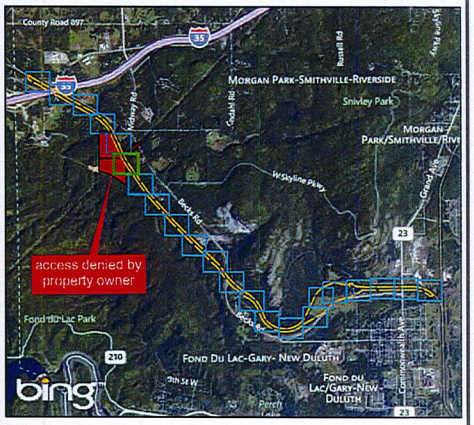


LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- WETLAND/STREAM CONTINUES BEYOND EXTENT OF DELINEATION
- ACCESS TO THIS PROPERTY WAS DENIED BY THE OWNER



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

0 50 100 200
FEET
1 INCH = 100 FEET

PROJECT
WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE
WETLAND DIAGRAMS

Golder Associates

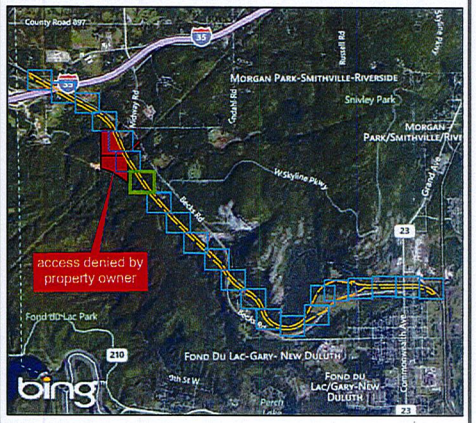
PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN
GIS	KJC	6/3/2014	REV	1
CHECK	BH	6/3/2014		
REVIEW	KT	6/3/2014		

FIGURE 2F

M:\Steelton Hill 1303084\Mapping\2014_Maps\Figure2_WetlandDiagramsMB_2014Revised.mxd | Modified: KJCarpenter 6/3/2014 3:01:32 PM | Denver, CO

LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- WETLAND/STREAM CONTINUES BEYOND EXTENT OF DELINEATION



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

0 50 100 200 FEET

1 INCH = 100 FEET

PROJECT

WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE

WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.	
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN
GIS	KJC	6/3/2014	REV	1
CHECK	BH	6/3/2014		
REVIEW	KT	6/3/2014		

FIGURE 2G

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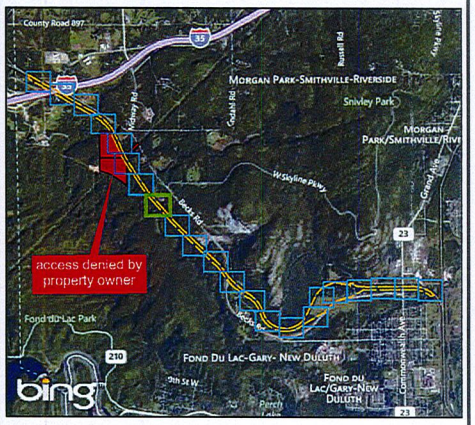
LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- WETLAND/STREAM CONTINUES BEYOND EXTENT OF DELINEATION



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

0 50 100 200
FEET

1 INCH = 100 FEET

PROJECT
WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE
WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagrams_2014Revised.mxd
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN
GIS	KJC	6/3/2014	REV	1
CHECK	BH	6/3/2014		
REVIEW	KT	6/3/2014		

FIGURE 2H

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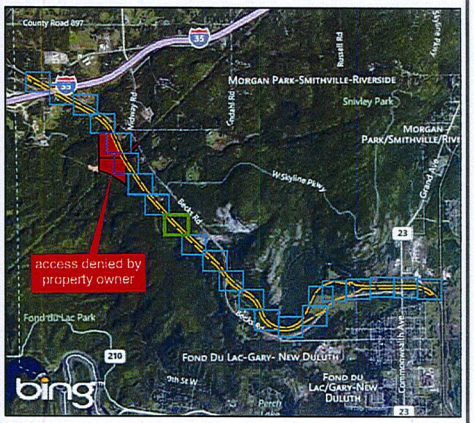
LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- WETLAND/STREAM CONTINUES BEYOND EXTENT OF DELINEATION



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

0 50 100 200
FEET

1 INCH = 100 FEET

PROJECT

WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE

WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN
GIS	KJC	6/3/2014	REV	1
CHECK	BH	6/3/2014		
REVIEW	KT	6/3/2014		

FIGURE 2I

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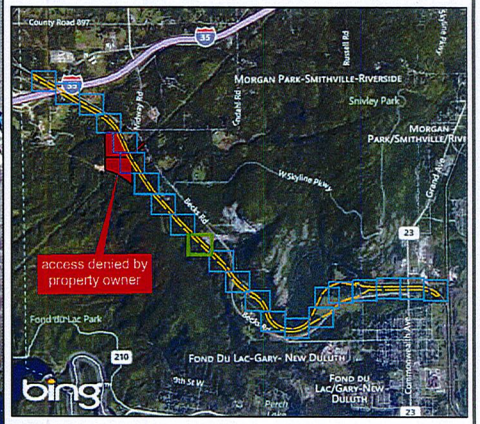
LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- APPROXIMATE LIMITS OF THE SITE



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

0 50 100 200 FEET

1 INCH = 100 FEET

PROJECT

WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE

WETLAND DIAGRAMS

Golder Associates

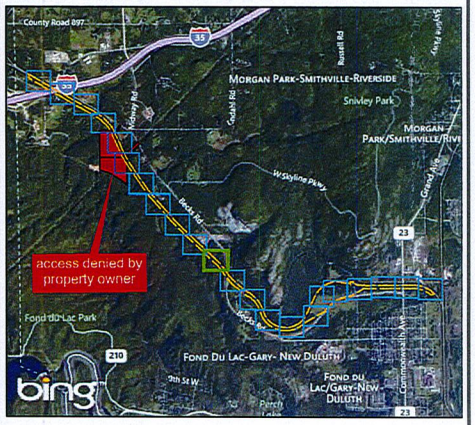
PROJECT No.		1303084	FILE No.	
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN
GIS	KJC	6/3/2014	REV	1
CHECK	BH	6/3/2014		
REVIEW	KT	6/3/2014		

FIGURE 2J

M:\Steelton Hill 1303084\Mapping\2014_Maps\Figure2_WetlandDiagramsMB_2014Revised.mxd | Modified: KJCarpenter 6/3/2014 3:01:32 PM | Denver, CO

LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- APPROXIMATE LIMITS OF THE SITE



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

0 50 100 200
FEET
1 INCH = 100 FEET

PROJECT
WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE
WETLAND DIAGRAMS

Golder Associates

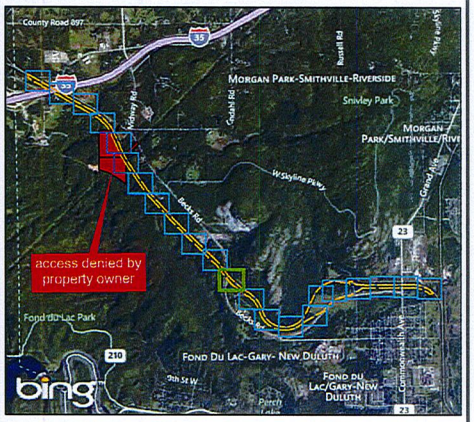
PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN
GIS	KJC	6/3/2014	REV	1
CHECK	BH	6/3/2014		
REVIEW	KT	6/3/2014		

FIGURE 2K

M:\Steelton Hill 1303084\Mapping\2014_Maps\Figure2_WetlandDiagramsMB_2014Revised.mxd | Modified: KJCarpenter 6/3/2014 3:01:32 PM | Denver, CO

LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE LIMITS OF THE SITE



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

0 50 100 200 FEET

1 INCH = 100 FEET

PROJECT

WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE

WETLAND DIAGRAMS

Golder Associates

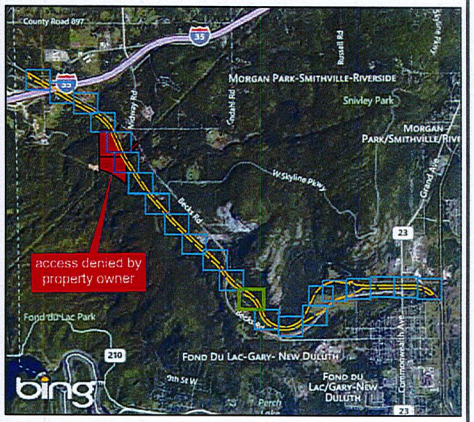
PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd	
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN	REV 1
GIS	KJC	6/3/2014			
CHECK	BH	6/3/2014			
REVIEW	KT	6/3/2014			

FIGURE 2L

M:\Steelton Hill 1303084\Mapping\2014_Maps\Figure2_WetlandDiagramsMB_2014Revised.mxd | Modified: KJCarpenter 6/3/2014 3:01:32 PM | Denver, CO

LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- WETLAND/STREAM CONTINUES BEYOND EXTENT OF DELINEATION



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

0 50 100 200 FEET

1 INCH = 100 FEET

PROJECT

WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE

WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.		
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN	REV 1
GIS	KJC	6/3/2014			
CHECK	BH	6/3/2014			
REVIEW	KT	6/3/2014			

FIGURE 2M

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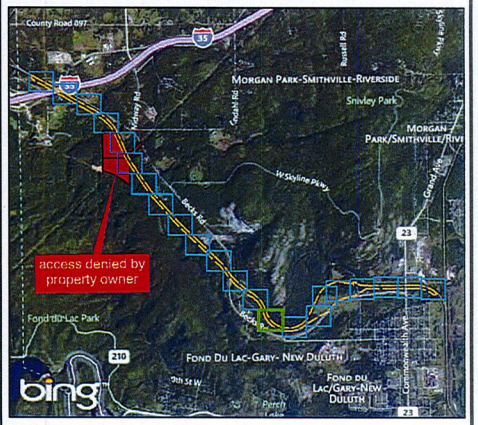
LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- WETLAND/STREAM CONTINUES BEYOND EXTENT OF DELINEATION



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

0 50 100 200
FEET

1 INCH = 100 FEET

PROJECT

WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE

WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd	
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN	REV 1
GIS	KJC	6/3/2014			
CHECK	BH	6/3/2014			
REVIEW	KT	6/3/2014			

FIGURE 2N

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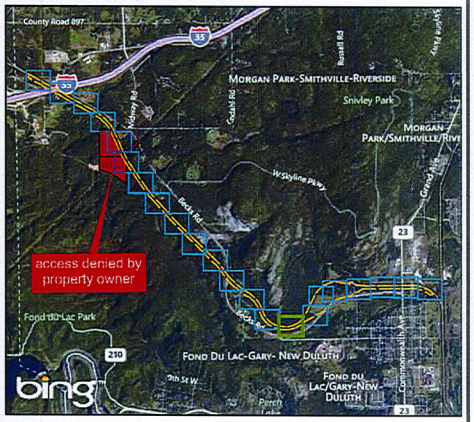
LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE LIMITS OF THE SITE



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

0 50 100 200 FEET

1 INCH = 100 FEET

PROJECT

WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE

WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.	
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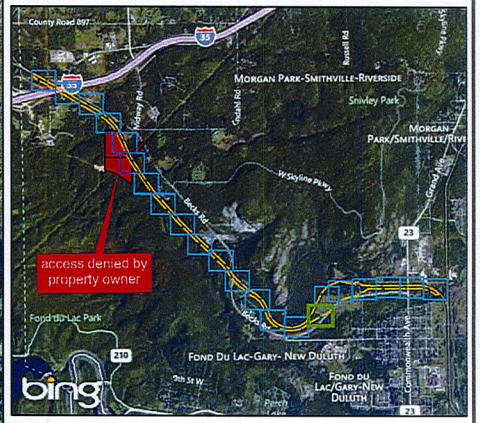
GIS	KJC	6/3/2014		
CHECK	BH	6/3/2014		
REVIEW	KT	6/3/2014		

FIGURE 20

M:\Steelton Hill 1303084\Mapping\2014_Maps\Figure2_WetlandDiagramsMB_2014Revised.mxd | Modified: KJCarpenter 6/3/2014 3:01:32 PM | Denver, CO

LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- WETLAND/STREAM CONTINUES BEYOND EXTENT OF DELINEATION



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

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FEET

1 INCH = 100 FEET

PROJECT
WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE
WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.		
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GIS	KJC	6/3/2014			
CHECK	BH	6/3/2014			
REVIEW	KT	6/3/2014			

FIGURE 2P

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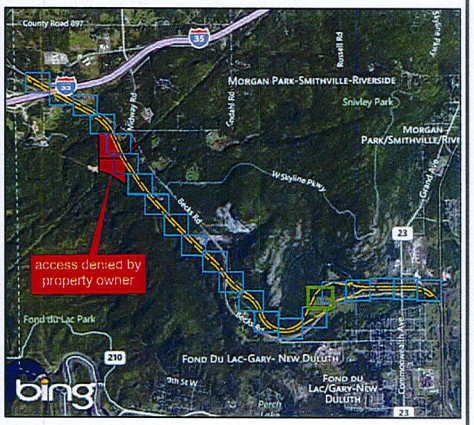
LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

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FEET
1 INCH = 100 FEET

PROJECT
WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE
WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd
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REVIEW	KT	6/3/2014		

FIGURE 2Q

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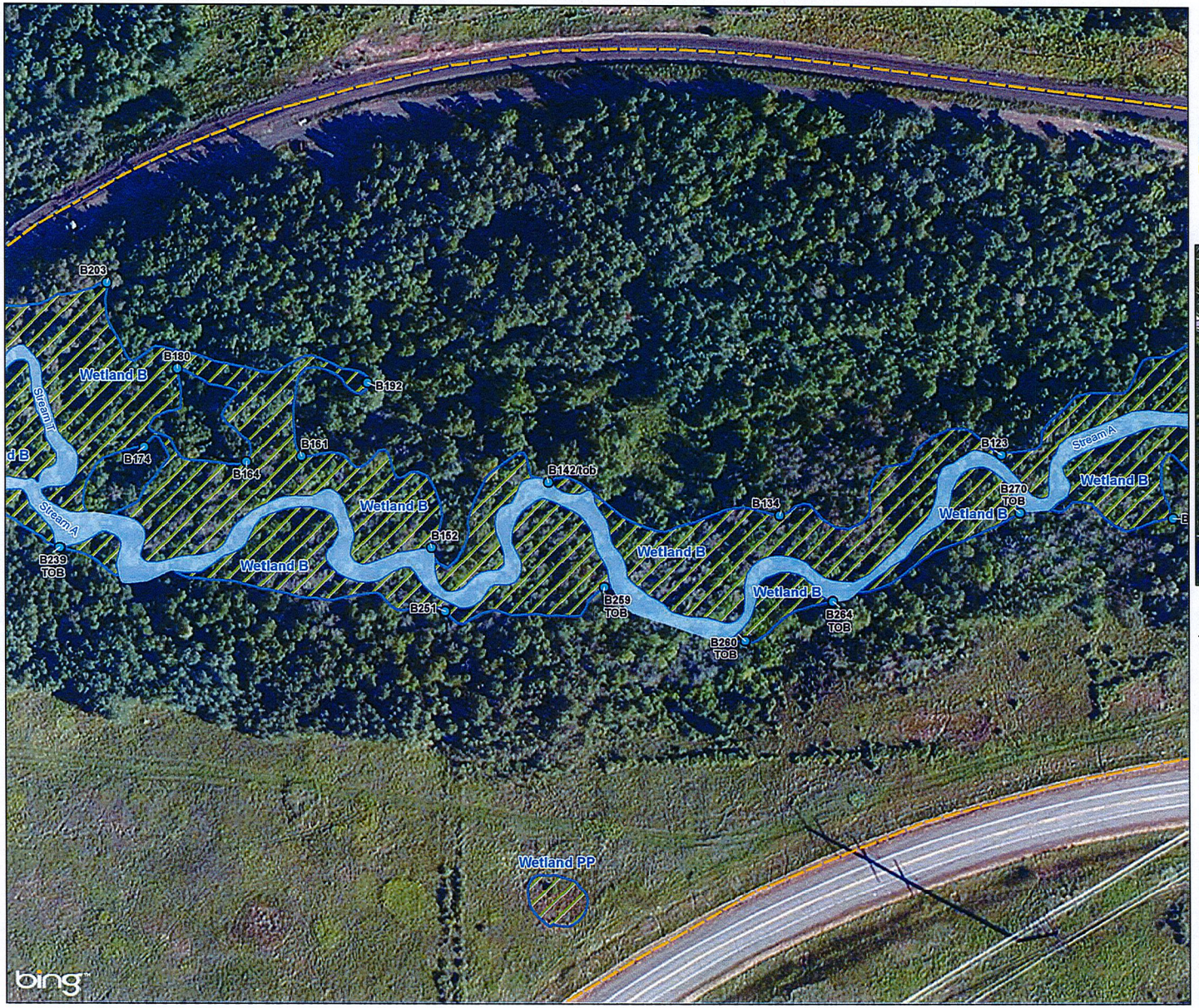
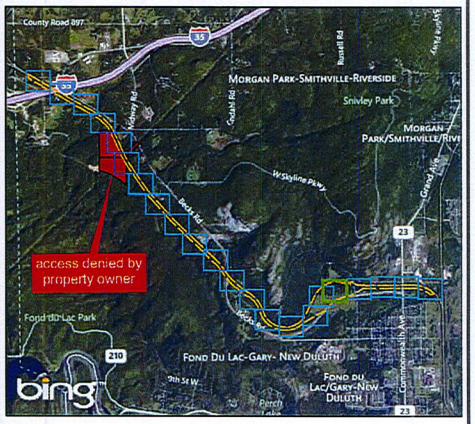


LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

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FEET
1 INCH = 100 FEET

PROJECT
WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE
WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN
GIS	KJC	6/3/2014	REV	1
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REVIEW	KT	6/3/2014		

FIGURE 2R

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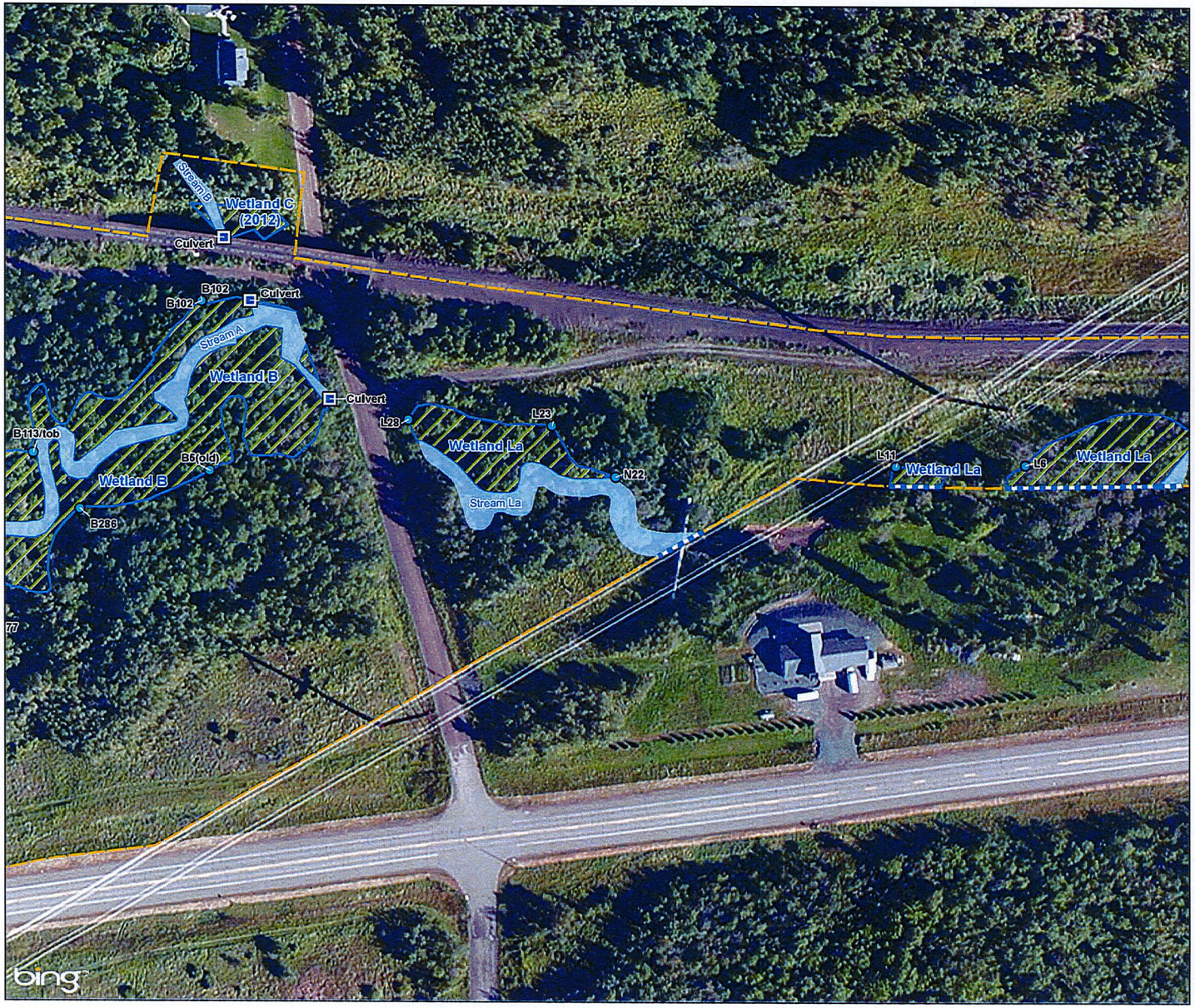
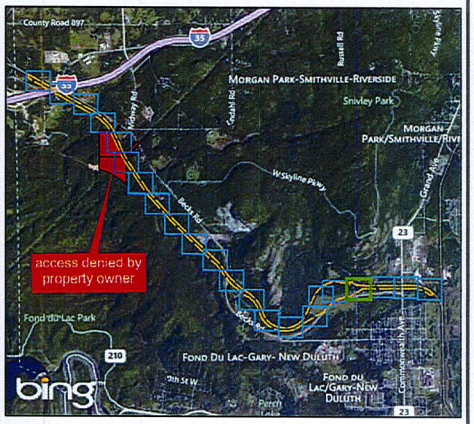


LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- WETLAND/STREAM CONTINUES BEYOND EXTENT OF DELINEATION



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

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N

0 50 100 200
FEET

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PROJECT
WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE
WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN
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CHECK	BH	6/3/2014		
REVIEW	KT	6/3/2014		

FIGURE 2S

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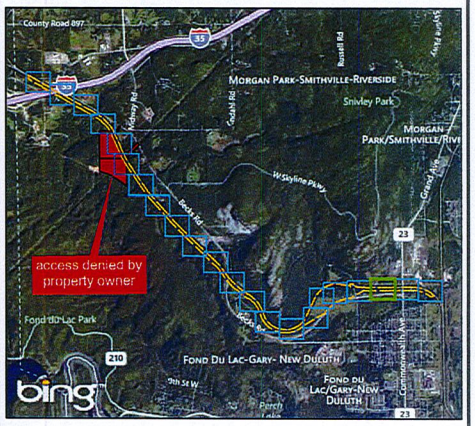
LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- WETLAND/STREAM CONTINUES BEYOND EXTENT OF DELINEATION



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH FIPS 2201 FEET.

N

0 50 100 200 FEET

1 INCH = 100 FEET

PROJECT

WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE

WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd	
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN	REV 1
GIS	KJC	6/3/2014			
CHECK	BH	6/3/2014			
REVIEW	KT	6/3/2014			

FIGURE 2T

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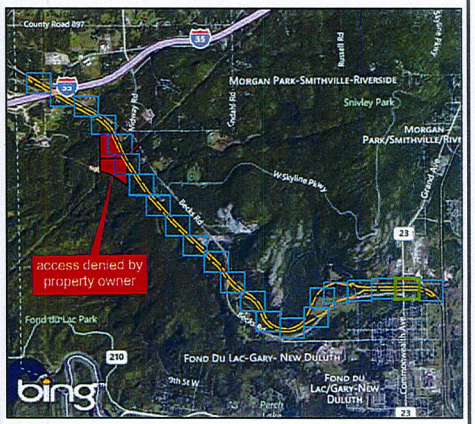
LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- WETLAND/STREAM CONTINUES BEYOND EXTENT OF DELINEATION



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

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FEET

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PROJECT
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Golder Associates

PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd
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REVIEW	KT	6/3/2014		

FIGURE 2U

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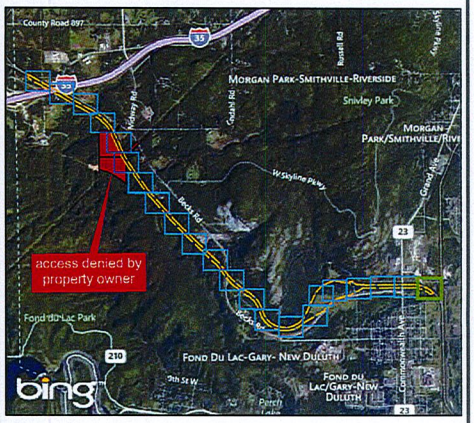
LEGEND

- DELINEATION POINT
- CULVERT
- GROUNDWATER SEEP
- APPROXIMATE STREAM BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- WETLAND/STREAM CONTINUES BEYOND EXTENT OF DELINEATION



NOTES

DELINEATED WETLANDS REVISED 5/29/2014.

REFERENCES

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N

0 50 100 200
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1 INCH = 100 FEET

PROJECT
WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE
WETLAND DIAGRAMS

Golder Associates

PROJECT No.		1303084	FILE No.	Figure2_WetlandDiagramsMB_2014Revised.mxd	
DESIGN	KJC	5/30/2014	SCALE	AS SHOWN	REV 1
GIS	KJC	6/3/2014			
CHECK	BH	6/3/2014			
REVIEW	KT	6/3/2014			

FIGURE 2V

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